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ANNUAL REPORT

OF

THE SCHOOL COMMITTEE


PREPARED BY THE

SUPERINTENDENT OF SCHOOLS

1898



CAMBRIDGE, MASS.:
PRESS OF CAUSTIC & CLAFLIN,
26A BRATTLE ST.



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City of Cambridge

E. E. White

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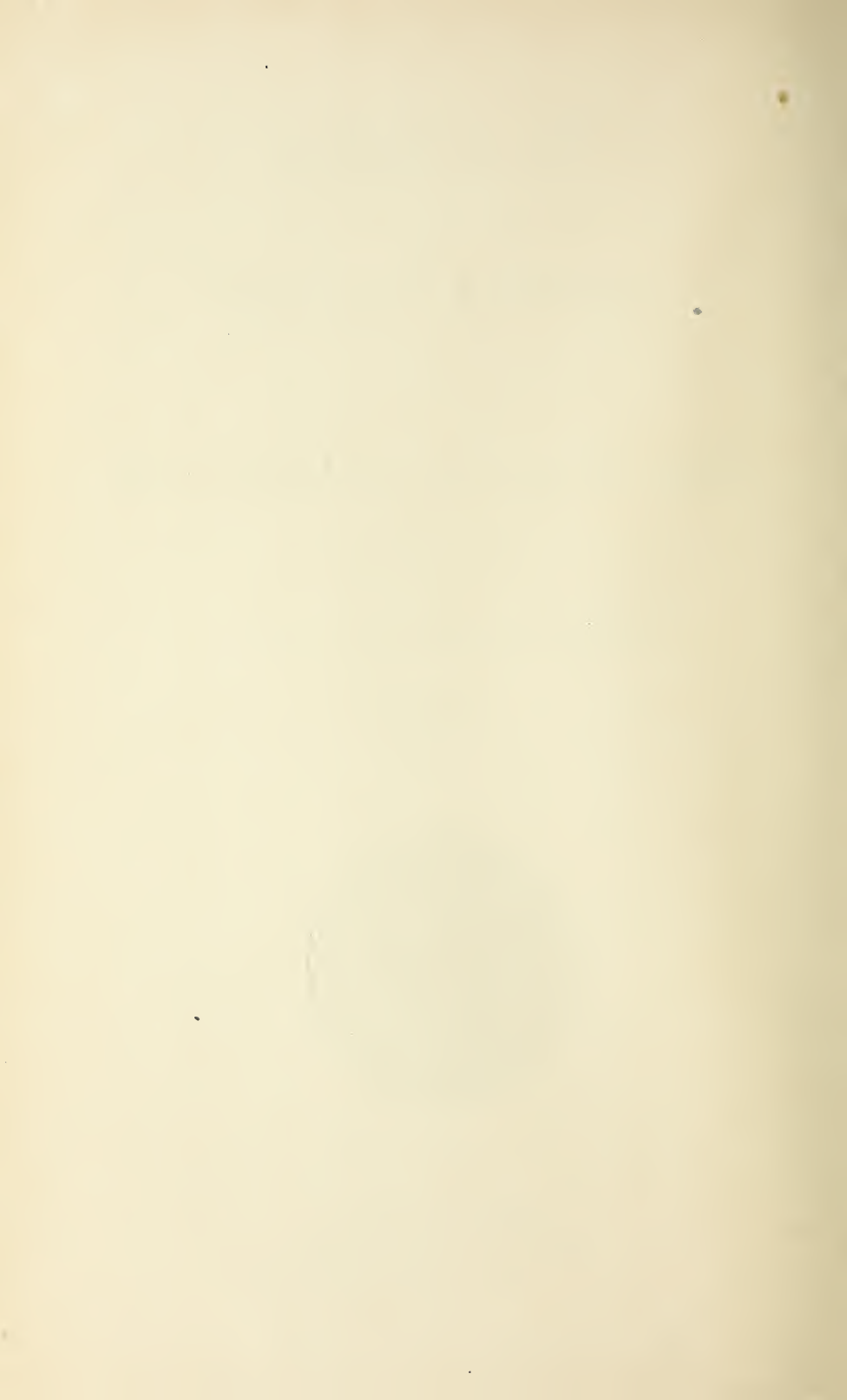
1898



CAMBRIDGE, MASS. :

PRESS OF CAUSTIC & CLAFLIN,

26A BRATTLE ST.



REPORT OF THE SCHOOL COMMITTEE FOR 1898

In compliance with Section 142 of the Regulations for the Public Schools, the Superintendent herewith submits his twenty-fourth annual report, it being for the year ending December 31, 1898.

Population of Cambridge.

1875	.	.	.	.	.	47,838	|	1895	.	.	.	.	.	.	81,643
1885	.	.	.	.	.	59,658	|	1898, estimated	.	.	.	.	.	.	89,276

School Census.

Number of children in the city on the first of May, five years old or more, but less than fifteen, as reported by the Truant Officers.

1885	.	.	.	.	.	10,957	|	1895	.	.	.	.	.	.	12,869
1890	.	.	.	.	.	11,971	|	1898	.	.	.	.	.	.	14,036

Schools and Classrooms.

Latin School	.	.	.	.	.	1	Classrooms in use	.	.	.	.	.	.	12
English High School	.	.	.	.	.	1	" " "	.	.	.	.	.	.	14
Grammar Schools	.	.	.	.	.	8	" " "	.	.	.	.	.	.	98
Primary Schools	.	.	.	.	.	19	" " "	.	.	.	.	.	.	95
Grammar and Primary Schools	.	.	.	.	.	6	" " "	.	.	.	.	.	.	66
Kindergartens	.	.	.	.	.	11	" " "	.	.	.	.	.	.	11
Evening Drawing School	.	.	.	.	.	2	" " "	.	.	.	.	.	.	5
Evening High School	.	.	.	.	.	1	" " "	.	.	.	.	.	.	8
Evening Elementary Schools	.	.	.	.	.	4	" " "	.	.	.	.	.	.	17
Whole number of Day Schools	.	.	.	.	.	.	.	.	.	.	.	.	.	46
Number of Classrooms for Day Schools	.	.	.	.	.	.	.	.	.	.	.	.	.	296

High Schoolhouses.

Schoolhouses	Number of Classrooms	Estimated Value	Size of Lots, Square Feet	Estimated Value	Total Value
Latin	8	\$40,000	37,828	\$15,900	\$55,900
Lee Street	6	10,000	10,100	5,000	15,000
English High	11	220,000	74,366	18,000	238,000
Total	25	\$270,000	122,294	\$38,900	\$308,900

Grammar Schoolhouses.

Schoolhouses	Number of Classrooms	Estimated Value	Size of Lots, Square Feet	Estimated Value	Total Value
Agassiz*.....	7	\$17,400	19,689	\$6,600	\$24,000
Allston.....	12†	30,000	15,193	4,600	34,600
Harvard.....	16†	44,000	20,494	12,000	56,000
Morse*.....	14†	73,000	25,650	7,000	80,000
Peabody.....	6	27,000	21,813	8,000	35,000
Putnam.....	13†	60,000	14,400	14,300	74,300
Russell*.....	10†	41,000	33,073	4,000	45,000
Shepard.....	11	30,000	14,755	7,000	37,000
Sleeper*.....	8	24,800	21,284	4,200	29,000
Taylor*.....	10†	38,000	23,592	7,000	45,000
Thorndike.....	12	30,000	10,027	4,000	34,000
Washington.....	12†	25,000	14,951	10,000	35,000
Webster.....	16†	50,000	25,839	9,000	59,000
Wellington*†.....	13†	42,000	27,673	8,300	50,300
Total.....	160	\$532,200	288,433	\$106,000	\$638,200

* Used for grammar and primary grades.

† Also an assembly hall.

‡ On the same lot there is another schoolhouse containing four rooms used for primary classes.

Primary Schoolhouses.

Schoolhouses	Number of Classrooms	Estimated Value	Size of Lots, Square Feet	Estimated Value	Total Value
Boardman.....	8	\$12,000	10,018	\$4,500	\$16,500
Corlett.....	2*	3,000	10,000	1,000	4,000
Cushing.....	2	3,000	14,787	1,500	4,500
Dana.....	4	2,000	14,317	4,300	6,300
Dunster.....	4	4,000	10,000	2,000	6,000
Felton.....	4	6,000	15,090	4,500	10,500
Gannett.....	5	12,000	15,434	3,000	15,000
Gore.....	12	25,000	9,900	4,000	29,000
Holmes.....	4†	6,000	11,182	4,500	10,500
Lassell.....	4	8,000	10,000	2,500	10,500
Lowell.....	4	7,000	12,033	2,500	9,500
Otis.....	8	12,000	8,270	4,000	16,000
Parker.....	6	19,000	12,329	7,000	26,000
Quincy.....	2	10,000	8,469	5,000	15,000
Reed.....	4	4,000	12,000	1,200	5,200
Riverside.....	4	5,000	11,198	3,000	8,000
Sargent.....	4	3,000	9,995	4,000	7,000
Stearns.....	4	3,000	10,050	5,000	8,000
Tarbell.....	4	8,000	19,500	4,000	12,000
Willard.....	12	25,000	20,079	5,000	30,000
Wyman.....	6	6,000	14,347	3,500	9,500
Primary, Total....	107	\$183,000	258,998	\$76,000	\$259,000
Grammar, ".....	160	532,200	288,433	106,000	638,200
High Schools, ".....	25	270,000	122,294	38,900	308,900
Summary.....	292	\$985,200	669,725	\$220,900	\$1,206,100

* Used for a kindergarten.

† Used for a manual training school.

Number of teachers in the Day Schools.

[Special teachers are included in the total.]

December	Latin School	English High School	Grammar Schools	Primary Schools	Kinder-gartens	Total	Normal Graduates
1893	11	19	138	108	13	297	171
1894	12	21	142	114	15	312	191
1895	14	21	146	116	16	322	198
1896	15	21	151	124	17	337	207
1897	16	23	157	127	22	354	219
1898	16	23	161	133	22	364	237

Attendance at all the Day Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1893	13,107	11,045	10,074	91.2
1894	13,254	11,166	10,322	92.4
1895	13,571	11,505	10,611	92.2
1896	13,992	11,957	11,068	92.6
1897	14,373	12,317	11,397	92.5
1898	15,026	12,907	11,978	92.8

Attendance at the Latin School.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1893	269	251	236	94.1
1894	319	303	286	94.3
1895	380	354	334	94.3
1896	411	373	351	94.2
1897	387	358	339	94.5
1898	398	362	343	94.7

Attendance at the English High School.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1893	681	569	549	96.5
1894	691	611	594	97.1
1895	743	648	626	96.7
1896	733	632	611	96.6
1897	714	644	622	96.7
1898	773	685	662	96.7

Attendance at the Grammar Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1893	5,981	5,206	4,838	92.9
1894	5,934	5,200	4,876	93.8
1895	5,926	5,204	4,888	93.9
1896	6,069	5,439	5,105	93.9
1897	6,318	5,682	5,351	94.2
1898	6,570	5,883	5,548	94.3

Attendance at the Primary Schools.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1893	5,757	4,666	4,215	90.3
1894	5,815	4,741	4,317	91.1
1895	5,928	4,925	4,499	91.3
1896	6,138	5,117	4,680	91.4
1897	6,308	5,192	4,741	91.3
1898	6,505	5,429	4,984	91.8

Attendance at the Kindergartens.

Year	Number of Pupils Registered	Average Number Belonging	Average Daily Attendance	Per cent of Attendance
1894	495	311	249	80.3
1895	594	374	264	70.6
1896	641	396	321	81.2
1897	646	441	344	78.1
1898	780	548	441	80.4

Number of pupils admitted to the lowest grade of the Latin School.

Course, 5 years.

Year	Boys	Average Age	Girls	Average Age
1892	52	14 years 7 months	32	14 years 7 months
1894	51	14 years 8 months	44	14 years 4 months
1895	54	14 years 6 months	48	14 years 5 months
1896	47	14 years 4 months	54	14 years 6 months
1897	61	14 years 7 months	52	14 years 7 months
1898	49	14 years 8 months	56	14 years 3 months

Number of pupils graduated from the Latin School.

Course, 5 years.

Year	Boys	Average Age	Girls	Average Age
1892	8	17 years 8 months	14	18 years 7 months
1894	15	18 years 11 months	12	19 years 6 months
1895	16	18 years 9 months	9	18 years 11 months
1896	16	18 years 0 months	18	18 years 6 months
1897	21	19 years 1 month	14	18 years 6 months
1898	16	18 years 1 month	27	18 years 3 months

Number of pupils admitted to lowest grade of the English High School.

Year	Boys	Average Age	Girls	Average Age
1892	62	15 years 2 months	168	15 years 3 months
1894	82	15 years 2 months	157	15 years 2 months
1895	55	14 years 9 months	140	15 years 0 months
1896	61	14 years 7 months	131	15 years 2 months
1897	57	14 years 9 months	150	15 years 0 months
1898	60	14 years 8 months	169	15 years 1 month

Number of pupils graduated from the English High School.

Year	Boys	Average Age	Girls	Average Age
1892	15	18 years 3 months	37	18 years 11 months
1894	12	18 years 8 months	53	18 years 7 months
1895	14	18 years 8 months	40	18 years 4 months
1896	12	18 years 7 months	50	18 years 4 months
1897	14	18 years 1 month	56	18 years 9 months
1898	19	18 years 9 months	64	18 years 5 months

Number of pupils admitted to the lowest grade of the Manual Training School, with the number of graduates.

Year	Admitted	Average Age	Graduated	Average Age
1892	85	15 years 3 months	25	18 years 0 month
1894	72	15 years 2 months	26	17 years 10 months
1895	63	15 years 2 months	35	17 years 8 months
1896	59	15 years 6 months	10	18 years 6 months
1897	84	15 years 4 months	20	18 years 6 months
1898	70	15 years 5 months	14	18 years 2 months

Number of pupils graduated from the Grammar and Primary Schools.

Year	Grammar Schools. Course, 6 yrs.	Average Age	Primary Schools. Course, 3 yrs.	Average Age
1893	487	14 years 11 months	1,147	9 years 9 months
1894	563	14 years 11 months	1,159	9 years 8 months
1895	491	14 years 9 months	1,209	9 years 10 months
1896	467	14 years 10 months	1,273	9 years 9 months
1897	521	14 years 11 months	1,292	9 years 9 months
1898	518	15 years 0 months	1,395	9 years 8 months

Length of time in completing the Course of Study in the Grammar Schools.

Year	In 4 years	In 5 years	In 6 years	In 7 years or more
1893	9 per cent	29 per cent	47 per cent	15 per cent
1894	10 per cent	32 per cent	42 per cent	16 per cent
1895	9 per cent	30 per cent	46 per cent	15 per cent
1896	8 per cent	33 per cent	49 per cent	10 per cent
1897	6 per cent	30 per cent	51 per cent	13 per cent
1898	6 per cent	29 per cent	47 per cent	18 per cent

Length of time in completing the Course of Study in the Primary Schools.

Year	In 2 years	In 2½ years	In 3 years	In 3½ years	In 4 years	In 4½ years or more
1894	8 per cent	2 per cent	58 per cent	2 per cent	21 per cent	9 per cent
1895	5 per cent	1 per cent	56 per cent	5 per cent	23 per cent	10 per cent
1896	7 per cent	2 per cent	60 per cent	3 per cent	21 per cent	7 per cent
1897	2 per cent	3 per cent	63 per cent	4 per cent	21 per cent	7 per cent
1898	4 per cent	2 per cent	59 per cent	6 per cent	20 per cent	9 per cent

Number of pupils in all the Day Schools at different periods of the year.

Year	First Day of the First Week	First Day of the Second Week	First Week of October	First Week of the next June
1893	10,692	11,354	11,628	11,532
1894	10,889	11,562	11,847	11,723
1895	11,178	11,894	12,146	12,002
1896	11,580	12,314	12,697	12,569
1897	12,303	13,085	13,281	12,956
1898	12,728	13,473	13,691	

Number of pupils in the Latin School, December, 1898.

Grade	Boys	Girls	Total	Per cent
Fourteenth	17	30	47	.123
Thirteenth.....	32	31	63	.164
Twelfth	34	39	73	.191
Eleventh	37	44	81	.211
Tenth	58	61	119	.311
Total.....	178	205	383	

Number of pupils in the English High School and in the Manual Training School, December, 1898.

Grade	Boys	Girls	Total	Per cent
Thirteenth	45 (20)*	56	101	.137
Twelfth	72 (34)*	60	132	.180
Eleventh	99 (61)*	108	207	.281
Tenth	130 (71)*	166	296	.402
Total.....	346 (186)*	390	736	

* Manual Training School.

Number of pupils in the Grammar Schools, December, 1898.

Grade	Boys	Girls	Total	Per cent
Ninth	271	276	547	.086
D	24	31	55	.009
Eighth	324	392	716	.113
C	68	85	153	.024
Seventh	415	429	844	.133
Sixth.....	517	527	1,044	.164
B	96	105	201	.032
Fifth.....	626	575	1,201	.189
A	163	190	353	.055
Fourth	631	612	1,243	.195
Total.....	3,135	3,222	6,357	

Number of pupils in the Primary Schools, December, 1898.

Grade	Boys	Girls	Total	Per cent
Third	754	798	1,552	.272
Second..	845	890	1,735	.304
First	1,217	1,202	2,419	.424
Total.....	2,816	2,890	5,706	

Number of pupils and teachers in the Kindergartens, 1896, 1897, 1898.

Year	Boys	Girls	Total	Number of Teachers
1896	231	270	501	17
1897	254	329	583	22
1898	265	339	604	22

Number of pupils belonging to the Evening Drawing Schools, with the average attendance.

1893	1894	1895	1896	1897	1898
242	217	212	193	209	182
142	103	117	103	114	99

Number of pupils belonging to the Evening Schools, with the average attendance.

1893	1894	1895	1896	1897	1898
1,085	1,379	1,246	1,128	1,225	1,165
419	542	478	445	448	494

Number of pupils in the Private Schools in Cambridge, including those in the Parochial Schools.

1893	1894	1895	1896	1897	1898
2,376	2,492	2,557	2,518	2,512	2,637

Cost of instruction in the Evening Schools.

Year	Elementary	High	Drawing	Total
1893	\$2,124 50	\$1,363 00	\$1,531 00	\$5,018 50
1894	2,293 00	1,396 00	1,175 00	4,864 00
1895	2,427 00	1,422 50	1,255 00	5,104 50
1896	2,104 00	1,321 50	1,110 00	4,535 50
1897	2,086 00	1,274 50	1,060 00	4,420 50
1898	2,324 00	1,439 00	1,091 00	4,854 00

REPORT OF SCHOOL COMMITTEE

Cost of instruction in the Day Schools.

[Salaries of teachers, superintendent, agent, clerks, and truant officers.]

Year	Number of Teachers, December 1	Average Number of Pupils	Whole cost	Cost per Pupil
1876	176	7,066	\$164,818 00	\$23 32
1878	173	7,028	136,491 20	19 42
1880	182	7,175	130,371 75	18 17
1882	200	7,898	137,328 55	17 38
1884	216	8,414	152,290 62	18 09
1886	233	9,218	163,277 42	17 92
1888	241	9,756	175,773 80	18 02
1890	263	10,089	190,558 21	18 89
1892	284	10,861	207,144 22	19 07
1893	297	11,045	215,593 12	19 52
1894	312	11,166	228,873 48	20 50
1895	322	11,505	235,811 62	20 50
1896	337	11,957	245,104 01	20 50
1897	354	12,317	255,397 92	20 73
1898	364	12,907	268,182 97	20 78

Cost of the Day Schools.

[The expenditures for new schoolhouses are not included.]

Year	Number of Teachers, December 1	Average Number of Pupils	Whole cost	Cost per Pupil
1876	176	7,066	\$200,894 09	\$28 43
1878	173	7,028	162,437 77	23 11
1880	182	7,175	153,967 56	21 45
1882	200	7,898	166,230 52	21 04
1884	216	8,414	203,234 56	24 15
1886	233	9,218	207,536 46	22 51
1888	241	9,756	225,408 57	23 10
1890	263	10,089	241,980 84	23 98
1892	284	10,861	266,651 02	24 55
1893	297	11,045	274,033 82	24 81
1894	312	11,166	287,137 37	25 72
1895	322	11,505	299,085 93	26 00
1896	337	11,957	316,090 83	26 44
1897	354	12,317	327,319 90	26 57
1898	364	12,907	345,566 30	26 77

Summary of the School Census as taken by the Truant Officers, May, 1898.

[The statutes make it the duty of the School Committee to ascertain annually the names and ages of all persons between the ages of five and fifteen years belonging in their respective towns and cities on the first day of May.]

Number of children in the city between five and fifteen . . .	14,036
Number in public schools between five and fifteen . . .	11,597
Number in public schools fifteen years old or more . . .	1,458
Number in private schools between five and fifteen . . .	1,680
Number not attending school between five and eight . . .	537
Number not attending school between eight and fourteen . . .	70
Number not attending school between fourteen and fifteen . . .	152
Whole number not attending school between five and fifteen . . .	759
Number in the city between five and six . . .	1,395
Number in the city between eight and fourteen . . .	8,391

Finances.

[For the financial year ending December 1, 1898.]

Cost of instruction in day schools	\$268,182 97
Cost of instruction in evening schools	4,854 00
Cost of care and repairs of schoolhouses, day schools	51,746 79
Cost of care and repairs of schoolhouses, evening schools	2,400 00
Cost of text-books and supplies	17,995 07
Expended for incidentals	1,207 09
Expended for care of truants	3,221 58
Expended for flags	212 80
Expended for new Latin schoolhouse	88,937 16
Expended for Roberts schoolhouse, Ward 2	29,083 60
Expended for Ellis schoolhouse, Ward 5	28,780 20
Expended for addition to Peabody schoolhouse, Ward 5	24,541 76
Expended for Taylor schoolhouse, grading and fencing	1,422 45
Expended for furniture for different buildings	1,359 93

Total expenditures for all school purposes	\$526,945 40
Deducting from the above the amount received from the Hopkins Fund, \$683.27, the tuition of State Wards, \$319.50, and for the tuition of non-resident pupils, \$1,281.50, the actual cost of the schools to the city is	\$524,661 13
Assessed value of real and personal estates, May, 1897	\$89,551,090 00
Ratio of expenditures for school purposes to the valuation in 1897 . . . . .	.0059

Statistics taken from the "sixty-second annual" report of the Secretary of the State Board of Education.

Number of cities and towns: cities, 32; towns, 321	353
Number of public schools	9,863
Number of pupils of all ages in the public schools during the year	456,141
Number of persons over fifteen years of age attending the public schools	44,770
Per cent of attendance based upon the average membership	92
Number of persons employed as teachers in the public schools during the year: men, 1,174; women, 12,029	13,203
Number of teachers who have graduated from normal schools	4,425
Average number of months the public schools have been kept for the entire year	9.3
Number of high schools	261
Number of teachers in high schools	1,384
Number of pupils in high schools	38,133
Amount expended upon the public schools, exclusive of the expense of school buildings	\$9,839,579 33
Cost of new schoolhouses, permanent improvements, and ordinary repairs	3,814,070 03
Entire expenditure for public school purposes	\$13,653,649 63

State Normal Schools including the State Normal Art School in Boston.

Bridgewater	Principal, Albert G. Boyden	Students, 274
Fitchburg	" John G. Thompson	" 113
Framingham	" Henry Whittemore	" 104
Hyannis	" W. A. Baldwin	" 55
Lowell	" Frank F. Coburn	" 140
North Adams	" Frank Fuller Murdock	" 106
Salem	" Walter P. Beckwith	" 140
Westfield	" Charles S. Chapin	" 160
Worcester	" H. Harlow Russell	" 190
Art School	" George H. Bartlett	" 284

TABULAR VIEW

December 1, 1898.

Prepared by the Secretary of the School Committee.

[Salaries are to be increased January 1, 1899.]

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898
Latin	William F. Bradbury.....	\$3,000	383
	Theodore P. Adams.....	2,000	
	John I. Phinney.....	1,700	
	Max Benshimol.....	1,000	
	Helen M. Albee.....	950	
	Constance Alexander.....	850	
	Mary A. Bachelder.....	800	
	Alice Cary Baldwin.....	850	
	Mabel L. Chamberlain.....	900	
	Caroline Drew.....	950	
	Mary C. Hardy.....	950	
	Rose Hardwick.....	850	
	Mabel E. Harris.....	750	
	Helen W. Munroe.....	750	
	Lena G. Perrigo.....	750	
	Jennie S. Spring.....	950	
	Annie S. Dodge*.....	500	
English High.....	Ray Greene Huling.....	3,000	736
	Edwin L. Sargent.....	2,000	
	Joseph A. Coolidge.....	1,500	
	Russell T. Greene, Jr.....	950	
	William E. Stark.....	1,200	
	Grace L. Deering.....	1,200	
	Helen E. Andrews.....	750	
	Caroline Close.....	950	
	Bertha L. Cogswell.....	950	
	Gertrude H. Crook.....	800	
	Esther S. Dodge.....	750	
	Myra I. Ellis.....	1,000	
	Maud A. Lawson.....	950	
	Henrietta E. McIntire.....	950	
	Mary Moulton.....	950	
	Louisa P. Parker.....	1,000	
	Lillian C. Rogers.....	950	
	Caroline A. Sawyer.....	950	
	Emma A. Scudder.....	950	
	Florence W. Smith.....	800	
Agassiz { Grammar.....	Martha R. Smith.....	950	{ 137
	Delia M. Stickney.....	1,200	
	Alice H. Stratton.....	750	
	Martha L. Babbitt*.....	600	
	Maria L. Baldwin.....	900	
	Edith C. Arey.....	400	
	Addie B. Byam.....	520	
	Mary G. Carpenter.....	620	
Primary.....	Mary P. Massé.....	620	{ 213

*Secretary and Librarian.

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898.
Agassiz.....	Mary A. Parsons.....	620	596
	Grace C. Stedman.....	520	
	Jennie L. Upham.....	620	
Allston.....	Benjamin W. Roberts.....	2,000	
	Sara A. Bailey.....	700	
	Emily R. Pitkin.....	650	
	Susan M. Adams.....	620	
	Mary Blair.....	620	
	Mary M. Brigham.....	620	
	Evelyn M. Dormer.....	520	
	S. Alice Fell.....	620	
	Susan L. Keniston.....	620	
	Evelyn B. Kenney.....	620	
	Ada M. Litchfield.....	620	
	Nina M. Marsh.....	620	848
	S. Agnes Mulloney.....	620	
	Ida G. Smith.....	620	
	Caroline M. Williams.....	620	
Harvard.....	James S. Barrell.....	2,000	
	Arthur B. Webber.....	1,000	
	Ada H. Wellington.....	700	
	Margaret B. Wellington.....	700	
	Anna M. Brown.....	650	
	Addie L. Bartlett.....	620	
	Mary F. Emerson.....	620	
	Frances Fabyan.....	620	
	Margaret M. Fearnis.....	470	
	Estella J. French.....	620	
	Eliza S. Getchell.....	620	
	Annie B. Lowell.....	620	
	Adeline M. Murphy.....	620	
	Elizabeth M. Nash.....	620	
	Laura L. Parmenter.....	470	
	Louise C. Patterson.....	620	
	Elizabeth L. Setchell.....	620	
	Annie M. Street.....	620	
	Emma F. West.....	620	
	Hortense O. Young.....	620	
Morse { Grammar.....	Mary A. Townsend.....	2,000	{ 435 212
Primary.....	Mary E. Towle.....	700	
	Marcia E. Ridlon.....	650	
	Elizabeth J. Baldwin.....	620	
	Marie B. Daniel.....	620	
	Annie M. Dow.....	620	
	Leila F. Drake.....	620	
	Ida J. Holmes.....	620	
	Mary E. Leavitt.....	620	
	Grace H. Manter.....	520	
	Alice E. May.....	620	
	Maude R. Pullen.....	400	
	Emilie F. Richardson.....	620	
	Mary E. Sawyer.....	620	
	Lucy M. Soulée.....	620	
	Gertrude D. Sprague.....	620	
Peabody.....	Frederick S. Cutter.....	2,000	
	Addie F. Cleary.....	700	

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898
Peabody.....	Susan Allison.....	\$620	604
	Anna F. Bellows.....	620	
	Charlotte A. Ewell.....	620	
	M. Lizzie Hewitt.....	620	
	Effie A. Perkins.....	520	
	Alice M. Tufts.....	570	
Putnam.....	Thomas W. Davis.....	2,000	
	Frederick B. Thompson....	1,200	
	Eliza M. Hussey.....	700	
	Heuriette E. de Rochemont.	650	
	Mary A. Carmichael.....	620	
	Anna L. P. Collins.....	620	
	Sarah M. Grieves.....	620	
	Hattie L. Jewell.....	620	
	Annie B. Josselyn.....	620	
	Louise A. Keeler.....	620	
	Marcia L. Marple.....	470	
	Anna E. Macmaster.....	400	
Russell { Grammar..... { Primary.....	Arthur C. Wadsworth.....	1,800	{ 298 83
	Alice G. Teele.....	700	
	Carrie J. Allison.....	520	
	Fannie P. Browning.....	620	
	Mary A. Connelly.....	470	
	Alice V. Currier.....	620	
	Edna W. Hodgkins.....	570	
	H. Maud McLean.....	570	
	Gertrude E. Russell.....	470	
	Loretta L. Shaw.....	570	
	Edward O. Grover.....	2,000	
	Nellie A. Hutchins.....	700	
	Caroline L. Blake.....	700	
	Helen W. Metcalf.....	650	
Shepard.....	Emma A. Faulkner.....	620	505
	Harriet Foster*.....	620	
	Lottie L. Griswold.....	620	
	Louise H. Griswold.....	620	
	Ella M. Horne.....	620	
	Ellen J. Hunt.....	620	
	Flora C. Ingraham.....	620	
	Theresa H. Mahoney.....	400	
	Mary A. Stephenson.....	620	
	Grace D. Street.....	620	
	A. Estelle Ingraham.....	900	
Sleeper { Grammar..... { Primary.....	Emily Bissell.....	570	{ 262 139
	Mabel E. Blake.....	620	
	Mary F. Calnane.....	620	
	Florence M. Dudley.....	520	
	Fannie G. Flanders.....	620	
	Alice M. Gage.....	570	
	Laura C. Harding.....	620	

*On leave of absence for study or travel in accordance with the rules of the School Committee.

Tabular View—Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898
Sleeper.....	Melissa M. Lloyd..... Evelyn J. Locke..... Blanche C. Trefethen.....	\$620 620 570	
Taylor { Grammar..... { Primary.....	Ella R. Avery..... Mary A. Boland..... Bridget T. Boyle..... Anna E. Callahan..... Lillian M. Canty..... Josephine Day..... Margaret E. Fuller..... Kate A. Hegarty..... Cecilia F. Leahy..... Mabel F. Reyecroft.....	900 470 620 620 620 470 520 620 520 620	{ 96 335
ndike	Ruel H. Fletcher..... Harriet A. Townsend..... Laura A. Westcott..... Grace W. Fletcher..... Lena S. Frederikson..... Harriet M. Hanson..... Emma A. Hopkins..... Elizabeth G. Hutchison..... Mary E. Nason..... Ellen M. Plympton..... Susan L. Senter..... Abby S. Taylor..... Lydia A. Whitcher.....	2,000 700 650 620 520 620 620 620 620 620 570 620 620	503
Washington.....	John W. Freese..... Leila H. Sprague..... Alice P. Fay..... Adelaide D. Billings..... Eldora J. Clark..... Mary L. Ellis..... Ellen A. Kidder..... Winifred L. Kinsley..... Emma Penney..... Margaret J. Penney..... Hattie Shepherd..... Mary E. Stiles..... Marianne M. Webb.....	2,000 700 650 620 620 620 620 620 620 620 620 620 620	404
Webster.....	John D. Billings..... William D. Tillson..... Alice C. Phinney..... Martha N. Hanson..... Ada A. Billings..... Mabel T. Ashley..... Ella E. Buttrick..... Charlotte M. Chase..... Fannie F. Curtis..... Susan I. Downs..... Josephine Hills..... Gertrude I. Hulbert..... M. Josephine Lamprey..... Anna S. Lamson..... Minnie V. Reid..... Sarah E. Rideout..... Harriette E. Shepard.....	2,000 1,000 700 700 650 620 620 620 620 620 620 570 620 620 620 620 620 620	743

Tabular View — Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898
Webster.....	Ellen F. Watson.....	\$620	370
Boardman	Elizabeth J. Karcher.....	690	
	Christine R. Denyven.....	620	
	Julia E. Dickson.....	470	
	Isabella M. Duguid.....	620	
	Myra Hatt.....	570	
	Grace Morgan.....	620	
	C. Florence Smith.....	620	
Cushing	Sarah E. Stewart.....	620	86
	Maude A. Deehan.....	630	
	Eva J. Irish.....	520	178
Dana.....	Georgia E. Martin.....	640	
	Jane Macmaster.....	620	
	Matilda Macmaster.....	620	
	Marion B. Magwire.....	620	145
Dunster	Nellie S. Walker.....	400	
	Susan E. Wyeth.....	645	
	Mary E. Colby.....	620	
	Mary A. Doran.....	620	196
	Agnes M. Sheridan.....	620	
Felton.....	Florence A. Rogers.....	640	
	Marcia R. Bowman.....	400	
	S. Emma Davis.....	620	
	Helen E. Hazard.....	620	
	Carrie H. Smith.....	620	215
Gannett.....	Mary A. Rady.....	645	
	Annie M. Billings.....	620	
	Anna M. Jones.....	620	
	Mary McFarlane.....	470	
	Augusta G. Mirick.....	620	487
Gore.....	Frances E. Pendexter.....	710	
	Charlotte A. Callahan.....	520	
	Mary L. Dolan.....	400	
	Katherine L. Dolan.....	400	
	Minnie A. Doran.....	570	
	Mary A. Hurley.....	470	
	Katherine L. McElroy.....	620	
	Julia G. McHugh.....	620	
	Mary E. Mulloney.....	620	
	Anastasia Peters.....	620	
	Anna Roach.....	400	171
Lassell.....	Jane E. Whoriskey.....	620	
	Frances E. Whoriskey.....	640	
	Rose V. Collier.....	620	
	Elizabeth B. Gahm.....	620	115
	Mary E. Whoriskey.....	570	
Lowell.....	Eusebia A. Minard.....	640	
	Malvina M. Joslin.....	620	293
	Agnes J. McElroy.....	620	
Otis.....	Ellen N. Leighton.....	685	
	Frances Allen.....	620	
	Josephine M. Doherty.....	620	
	Luella M. Marsh.....	620	
	Emma J. Ross.....	620	
	Margaret Sullivan.....	620	
	Ellen C. Walsh.....	620	
	Kate F. Wellington.....	620	

Tabular View—Continued.

Names of Schools	Teachers	Salaries	No. of Pupils Dec. 1, 1898
Parker.....	Mary A. Knowles	\$650	220
	Charlotte E. Clapp	620	
	Butella E. L. Conland.....	520	
	Mattie S. Cutting.....	470	
	Harriet R. Harrington	570	
Quincy.....	Agnes Marchant.....	620	108
	Lucy C. Wyeth.....	630	
	Eva G. Oakes.....	470	
Reed.....	Margaret T. Burke	640	184
	Margaret M. Brosnahan.....	470	
	Jennie R. Marsh.....	620	
Riverside.....	Julia A. Robinson.....	620	146
	Elizabeth A. Tower.....	640	
	Amanda M. Alger.....	620	
	Mary A. Burke.....	620	
Sargent.....	Mary A. Brown.....	645	253
	Christina D. Barbey*.....	620	
	Lucy M. Fletcher.....	620	
	Elmira F. Hall.....	620	
	Ella M. Leaver.....	620	
	Marion Prescott.....	400	
Stearns.....	Fannie E. Higgins.....	640	217
	Maria J. Bacon.....	620	
	Ellen A. Cheney.....	620	
	Eva A. Taylor.....	620	
Tarbell.....	Hattie A. Thayer.....	400	206
	Emma J. Young.....	640	
	Florence J. Alley.....	620	
	Sadie E. Meacham.....	620	
	Carrie P. Pierce.....	620	
Willard.....	Clara W. Ruggli	400	494
	Amelia Wright.....	710	
	Sally N. Chamberlain.....	620	
	M. Elizabeth Evans.....	620	
	Ella F. Gulliver.....	620	
	Julia S. Gushee.....	620	
	Mary E. G. Harrington.....	620	
	Louise W. Harris.....	620	
	Katherine M. Lowell.....	620	
	Belle Menard.....	620	
	Eliza D. Watson.....	620	
	Grace R. Woodward.....	620	
Wyman.....	Laura Wright.....	620	317
	M. Carrie Dickman.....	650	
	Mary E. Bassett.....	620	
	Addie M. Bettinson	620	
	Mary H. Brooks.....	470	
	Georgianna P. Dutcher.....	620	
	Genevieve S. Flint.....	620	
Wellington { Grammar... { Primary....	Mary M. Gilman.....	620	{ 619 { 323
	Herbert H. Bates.....	2,500	
	Sarah J. Gunnison.....	800	
	Margaret Kidd.....	800	
	Mary I. Vinton.....	800	
	Carrie H. Stevens.....	700	

* On leave of absence for study or travel in accordance with the rules of the School Committee.

Tabular View — Continued.

Names of Schools		Teachers	Salaries	No. of Pupils Dec. 1, 1898.
Kindergartens	Wellington	Emma M. Taylor.....	\$620	
		Training Class.....	4,500	
	Boardman.....	Mary B. Pratt.....	570	53
		Caroline F. Carrick.....	480	
	Corlett.....	Sarah S. Wells.....	620	40
		Annie M. Dodd.....	440	
	Dunster.....	Clara A. Hall.....	620	58
		Caroline A. Wolcott.....	480	
	Gannett.....	Gertrude M. Gove.....	620	52
		Carrie E. Shepherd.....	480	
	Gore.....	Selma E. Berthold	620	60
		Jennie S. Clough.....	440	
	Lowell.....	Melinda Gates.....	620	44
		Margaret L. Voorhees.....	440	
	Moore Street.....	Harriette E. Ryan.....	620	50
		Leonice S. Morse.....	440	
	Riverside.....	Helen I. Hutchison.....	620	64
		Edith L. Lesley.....	440	
	Sleeper.....	Mabel S. Adams.....	620	62
		Julia L. Frame.....	400	
	Taylor.....	Mary F. Leland.....	620	61
		Caroline A. Leighton.....	480	
	Willard.....	Ellen A. Watson.....	620	60
		Alice V. McIntire.....	440	

TEACHER OF BOTANY — Sarah E. Brassill	\$1,000
TEACHER OF GYMNASICS — Mabel L. Cummings	600
TEACHERS OF SEWING — Agnes Gordon	600
Alice H. Nay	600
Nancy T. Dawe	420
DIRECTOR OF MUSIC — Frederick E. Chapman	2,000
DIRECTOR OF DRAWING — Peter Roos	1,800
ASSISTANT IN DRAWING — Lucia N. Jennison	800
SPECIAL PRIMARY TEACHER — Mary A. Lewis	1,100
SUPERINTENDENT — Francis Cogswell	3,000
AGENT — Sanford B. Hubbard	2,000
CLERKS — Althea B. Frost	700
Myrta E. Smith	500
PORTER — John H. Lemon	500
TRUANT OFFICERS — Lucian S. Cabot	900
John Carmichael	900
Jeremiah Murphy	800
William H. Porter	900

The Post Office addresses of the several schools are as follows :

CAMBRIDGE — Latin, English High, Rindge Manual Training, * Corlett, † Peabody, † Washington, ‡ Agassiz, Cushing, Dunster, § Holmes, Lowell, Quincy, Riverside, ‡ Russell.

CAMBRIDGEPORT — † Allston, † Harvard, ‡ Morse, † Webster, ‡ Wellington, Boardman, Dana, Felton, Gannett, Parker, Sargent, Stearns, Tarbell, Willard.

EAST CAMBRIDGE — † Putnam, † Thorndike, Gore, Lassell, Otis, ‡ Taylor.

NORTH CAMBRIDGE — † Shepard, Reed, ‡ Sleeper, Wyman.

* Kindergarten.

† Grammar grades.

‡ Grammar and primary grades.

§ Manual Training.

Summary.

Number of pupils in Latin School	383
Number of pupils in English High School	736
Number of pupils in Grammar Schools	6,357
Number of pupils in Primary Schools	5,706
Number of pupils in Kindergartens	604
Total	13,786
Number of pupils belonging to Public Schools, Dec. 1, 1897	13,310
Increase of pupils, 1898	476
Increase of pupils, 1897	422
Increase of pupils, 1896	714
Increase of pupils, 1895	250
Increase of pupils, 1894	278
Increase of pupils, 1893	135
Increase of pupils, 1892	210
Increase of pupils, 1891	222
Average annual increase of pupils, from 1880 to 1890 (inclusive)	331

Cost of Instruction.

Latin School	\$18,325 00	For each pupil	47 84
English High School	26,051 17	“ “ “	35 88
Training School	12,771 00	“ “ “	14 41
Grammar Schools	104,723 55	“ “ “	18 25
Primary Schools	75,081 30	“ “ “	13 94
Kindergartens	11,675 95	“ “ “	19 33
Teacher of Sloyd	270 00		
Teachers of Sewing	1,560 00		
Director of Music	2,000 00		
Directors of Drawing	2,600 00		
Teacher of Botany	760 00		
Teacher of Gymnastics	600 00		
Substitute Teachers	513 00		
Superintendent	3,000 00		
Agent	2,000 00		
Clerks	1,200 00		
Special Teacher in Pri- mary Schools	1,100 00		
Truant Officers	3,452 00		
Porter	500 00		
	\$268,182 97	For each pupil	19 45

Cost of instruction in Evening High School	\$1,439 00
Cost of instruction in Evening Elementary Schools	2,324 00
Cost of instruction in Evening Drawing Schools	*1,091 00

\$4,854 00

* The director of drawing is principal of these schools. No part of his salary is included in this amount.

Remarks on the Statistics.

The increase over the last school year in the number of pupils registered is 653; in the average number belonging, 590; in the average daily attendance, 581. In the per cent of attendance there has been an increase of three-tenths of one per cent. The number belonging to the schools in December, 1897, was 13,310; in December, 1898, 13,786; an increase of 476. The entire cost of the day schools, excluding the expenditures for new schoolhouses and new furniture, exceeds that of last year by \$18,246.40, and the cost per pupil by 20 cents. In the entire cost of instruction the increase is \$12,785.05, an increase in the cost per pupil of 5 cents.

For several years the cost of the Cambridge schools has been compared with that of the schools in the other cities and towns of the State. The data upon which this comparison has been made has been taken from the annual report of the secretary of the Board of Education. Were this comparison continued for the year 1898, the results would be of no practical value, as upon January 1, 1899, the cost of the schools will be materially increased, and this will change the relative position of Cambridge among the towns and cities of the State in regard to the amount appropriated for schools according to valuation.

This increase in the cost of the schools for 1899 will be due to an increase in salaries and to the expenditure required for the support of the manual training school which heretofore has been maintained by Mr. Rindge.

Text-Books and Supplies.

At the meeting of the Board in December, the committee on supplies submitted a detailed report of the expenditures of that committee for the year. The report is as follows:—

In accordance with Section 29 of the Rules of the School Board, the Committee on Supplies submit their report for the school year ending July 1, 1898, it being their fourteenth annual report.

Stock on hand July 1, 1897	\$3,685 32	
Purchases and expenditures to July 1, 1898	20,213 08	
	<hr/>	\$23,898 40
Cash sales and exchanges	466 93	
Delivered to schools, officers, etc.	17,233 94	
	<hr/>	17,700 87
Stock on hand July 1, 1898		<u>\$6,197 53</u>

The purchases and expenditures have been :—

For text-books	\$7,946 58	
Desk and reference books	532 01	
Copy and drawing books	720 36	
Apparatus and furnishings	2,365 97	
Printing, \$177.75; expressage and labor, \$322.53	500 28	
Repairing books, \$321.70; diplomas, \$196.02	517 72	
Tuning pianos	23 50	
Miscellaneous supplies, etc.	7,361 59	
		19,968 01
Less the value of exchanges		107 65
		<u>\$19,860 36</u>

The net cost of text-books and supplies is as follows :—

Stock on hand July 1, 1897	\$3,685 32	
Bills paid by City Treasurer	19,860 36	
		\$23,545 68
Less stock on hand July 1, 1898	\$6,197 53	
Cash paid to City Treasurer, sales and damages	466 93	
		<u>6,664 46</u>
We have, net cost of all schools and officers		<u>\$16,881 22</u>

or an average cost per pupil of \$1.268. The average cost per pupil per annum for fourteen years has been \$1.226.

The annual cost per pupil for text-books and supplies since the introduction of the free text-book law is as follows :—

Year	Average cost per Pupil	Year	Average cost per Pupil	Year	Average cost per Pupil
1885	\$1.880	1890	\$1.334	1895	\$1.152
1886	1.170	1891	1.248	1896	1.436
1887	1.051	1892	1.149	1897	1.094
1888	1.068	1893	1.109	1898	1.268
1889	0.960	1894	1.243		

The cost of each grade of schools for text-books and supplies is as follows :

	Net Expense	Average per Pupil				
		1898	1897	1896	1895	1894
High Schools	\$3,921 39	\$3.555	\$3.398	\$3.403	\$2.925	\$3.794
Grammar Schools	4,262 57	.977	1.053	1.527	1.418	1.301
Mixed Schools	4,575 91	1.532	1.105	1.995	1.083	1.264
Primary Schools	2,307 00	.540	.420	.444	.325	.369
Kindergartens	584 87	1.003	.634	.580	.251	.588
Evening Schools	343 48	....	....	....	....	....
Special Teachers	77 25	....	....	....	....	....
Sloyd	394 96	....	....	....	....	....
Officers of Board	72 35	....	....	....	....	....
Incidentals	341 44	....	....	....	....	....
	<u>\$16,881 22</u>	<u>\$1.268</u>	<u>\$1.094</u>	<u>\$1.436</u>	<u>\$1.152</u>	<u>\$1.243</u>

The total expenditures of this year are greater by \$5,073.72 than those of last year (which it will be recalled were unusually small), and they exceed by \$0.042 the average expenditure per pupil for the fourteen years since the free text-book system was begun.

The increase in the amount spent for text-books is due to the change of several books in the English high school and to the introduction of a new music reader and additional books in the other schools. Fitting up the Sloyd school, additional apparatus for physics, and materials for the introduction of color work in the grammar schools, and the purchase of four pianos, caused a largely increased expenditure under the head of apparatus and furnishings. The opening of the Russell school called for extra expense amounting to over \$2,000. Part of the increase of \$0.051 per pupil for miscellaneous supplies is due to the expense of the drawing exhibition, to the purchase of blocks for the English high school for next year, and also to the introduction of color work in the grammar schools, referred to above. The constant need for careful supervision to prevent waste is especially apparent in regard to what are classed as miscellaneous supplies.

At least 14,000 pupils will have to be provided with text-books and other supplies during a part of the next financial year. At the average cost per pupil this will make \$17,500 required for the regular appropriation for text-books and supplies. To this must be added \$500 for each of the three new grammar schools, for desk and reference books, maps, charts, and other furnishings; \$400 to provide pianos for these schools, and \$1,500 for apparatus and furnishings of the new Latin school. From January 1, 1899, the cost of maintaining the manual training school must be borne by the city; the estimate for stock used in the shops and for text-books and other supplies is \$1,800.

The amount needed by this committee to carry on its work is \$22,700, and this sum is requested for the year 1898-99.

For flags and flagstaffs there has been expended \$226.13, of which \$103.56 was for repairs to flags.

It was intended that a mast for displaying the high school flag should have been set this year, but owing to the war it was found impossible to procure one for the amount estimated earlier, and the request for the small additional appropriation required was not granted by the city council.

School Accommodations.

The following is the report of the committee on schoolhouses : —

This year the Board may be congratulated on the prospect of the near completion of the new Latin school building and three practically new grammar schoolhouses ; the Ellis school on Norris street, North Cambridge, containing twelve rooms and a hall ; the Roberts school on Harvard street, corner of Winsor, Cambridgeport, with similar accommodations ; and the transformation of the Peabody school from a six room building to one of fourteen rooms and a hall, as originally designed ten years since.

In other parts of the city the need of new buildings or for remodeling old ones is undeniable. The interior of the Felton should be rearranged as suggested by this committee in their report two years ago. At that time the committee also mentioned the need of a modern building for the Dana school on Centre street. This school is in a good situation, but many just complaints are made of the building. If this were replaced by a new brick schoolhouse of eight rooms, the service would be less expensive, and the children from the Stearns school which is badly lighted and unsatisfactory, could be divided between the Dana and the Allston, and the lots occupied by the Sargent and Stearns could be surrendered for other uses.

The Otis schoolhouse in East Cambridge is unsanitary and, should there be a fire, unsafe. As the location is good the best plan seems to be so to remodel the interior as to provide six good schoolrooms with suitable small rooms and stairways.

The Washington schoolhouse has been condemned by the state authorities but continues to be used on sufferance. This occupies a valuable site and the proceeds from its sale would offset the cost of a new lot ; this should be below Harvard Square in order to relieve the pressure of the Webster school.

For the present year this committee urge only the remodelling of the Felton and the Otis and active preparations for a new Dana schoolhouse which should be under way before September, 1899.

New chairs and desks of the adjustable pattern have been put in two rooms each at the Morse, Reed, and Thorndike schools, and one room at the Webster school, and this replacement should be continued

yearly. The arrangement of a small room on a staircase at the Gore school for the use of the principal must be mentioned also.

The work of the janitors as a rule is much more satisfactory than formerly, most of the men appointed recently having been able and willing to do all that is required of them. During the last year new janitors have been appointed for the Gore, Peabody, Lowell, and Quincy schools, and men already in service have been transferred to the Taylor and Agassiz schools. The work of the inspector of janitors has continued to be of great service to the city and the schools.

Of the thirty-eight schoolhouses now in use, only one-half have brick sidewalks on the abutting streets; such sidewalks are included in the estimates for the schoolhouses now building and this should be the invariable rule. The other nineteen, including the Parker, Peabody, and Russell recently completed, should have paved sidewalks as soon as possible.

It is highly desirable also that the grounds about the schoolhouses should have more care than the park commission can give at present out of the limited appropriation for shade trees and public grounds, and it seems to this committee that a small appropriation should be made for schoolhouse yards. The Taylor and the Gore school yards have been put in good order, the former from the appropriation for building the Taylor schoolhouse.

In conclusion the committee wish to express their appreciation of the cordial response made by the superintendent of public buildings to the requests of this committee and the officials of the schools.

PLAN OF THE SCHOOL REPORT

For many years the subject matter and arrangement of the statistical part of the school reports have remained essentially unchanged; and for the past few years each report has contained certain definite information relating to the organization and conduct of the schools such as is frequently sought by parents or persons interested in school affairs. The same general plan has been followed in preparing this report.

Latin School. March 1, 1886, the Classical and English departments of the Cambridge high school were made two separate schools, called respectively "The Cambridge Latin School" and "The Cambridge English High School."

The following table shows the growth of the Latin school and the cost of instruction from year to year, beginning with the year 1888, the second full year of its organization : —

December 1	Number of Pupils	Number of Teachers	Cost of Instruction	Cost per Pupil	Number of Graduates
1888.....	231	10	\$12,211 00	\$52 86	22
1889.....	219	10	12,555 00	57 78	27
1890.....	227	10	12,607 41	55 54	17
1891.....	230	10	12,967 50	56 38	36
1892.....	262	10	12,751 07	48 66	22
1893.....	311	11	13,425 66	43 17	23
1894.....	368	12	14,359 66	39 02	27
1895.....	388	14	15,059 58	38 81	25
1896.....	371	15	16,525 00	44 54	34
1897.....	373	16	17,335 00	46 47	35
1898.....	383	16	18,325 00	47 84	43

The cost of the Latin school to the city is less than the above sum by the amount received from the Hopkins fund, which can be used only for classical instruction. Were this amount deducted, the annual cost per pupil would be from two to three dollars less than given above, according to the number of pupils in the school.

The course of study is arranged for five years, and for four years, and is almost wholly decided by the requirements for admission to Harvard College. Sixteen per cent of all the graduates have completed the work in four years. The following is the rule in regard to the admission of pupils to the Latin school, and also to the English

high school: "Pupils who have received the diploma of their respective grammar schools certifying that they have completed the prescribed course of study, may be admitted to either high school without an examination. For other persons who desire admission, an examination shall be held at the beginning of the autumn term under the direction of the committee on high schools, but pupils may be admitted to advance standing at any time. No pupil from any class in a grammar school shall be examined who does not present a certificate that he has pursued his studies during vacation."

For several years pupils who have received the diploma of graduation have not been admitted except on the recommendation of the principal of the school to which they respectively belong, or on an examination after additional study during the summer vacation. From two-thirds to three-fourths of the pupils are usually recommended for admission without an examination. About one-half of the remaining part do not seek admission.

For non-resident pupils the tuition is fifty dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and end at 1.30 P. M.

A new building for this school is nearly completed, and it is expected that it will be furnished and ready for use before the close of the present school year.

English High School. The English high school was organized March 1, 1886.

The following table shows the growth of the English high school and the cost of instruction from year to year, beginning with the year 1888, the second full year of its organization:—

December 1	Number of Pupils	Number of Teachers	Cost of Instruction	Cost per Pupil	Number of Graduates
1888.....	363	12	\$14,045 00	\$38 69	42
1889.....	455	14	16,157 96	35 51	52
1890.....	518	15	17,962 50	34 68	37
1891.....	575	16	18,767 50	32 64	48
1892.....	613	19	20,488 50	33 42	77
1893.....	656	19	22,095 00	33 68	95
1894.....	709	21	23,051 00	32 51	91
1895.....	674	21	24,369 40	36 16	89
1896.....	679	21	24,612 00	36 25	72
1897.....	730	23	25,194 09	34 51	90
1898.....	736	23	26,451 17	47 84	97

The general course of study is arranged for four years. Provision is also made for a commercial course of four years.

The requirements for admission to this school are the same as for admission to the Latin school.

For non-resident pupils the tuition is fifty dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and end at 1.30 P. M.

The following is from the report of the committee on high schools : — The staff of teachers in the Latin school and the English high school has remained substantially as in former years. But in one respect a change has taken place which deserves the attention of the Board. Two male teachers have been added, one in the Latin school and one in the English high school, both of whom are doing valuable service, and your committee believes it to be a gain that the proportion of male teachers has thus been slightly raised.

In the English high school an important change has been under consideration by the committee, and has been partly carried into effect. Hitherto, the English high school has had a commercial course covering two years and giving an education which was satisfactory neither for general culture nor as preparation for business. The committee has recommended the abolition of this course, and a substitution for it of a new commercial course, which shall cover four years. In the new commercial course it is designed that the work of the first two years shall be substantially the same as in the general course of the high school. In other words, during these first two years the pupils will be broadening and improving their general education. During the last two years attention will be given especially to those subjects advantageous for business life ; such as history, civics, political economy, business methods, bookkeeping, stenography, and typewriting. The details of the curriculum for the latter part of this revised commercial course are still under consideration, and it is hoped that recommendations on this subject will be laid before the Board early in the next year. But in preparation for this change the old two-year commercial course has already been abolished in so far that no new pupils have been admitted to it at the opening of this year ; although those who entered upon that course last year, and wish to complete it on the two-year plan, have been allowed to continue.

Both in the Latin school and in the high school, some rearrangement

of the pupils in the lowest class has been provided for. Experience has shown that in both these schools a certain number of pupils enter each year who find it difficult to keep up with the regular work. Their continuance in the classes is advantageous neither to themselves nor to the other scholars ; at the same time, virtually nothing is gained by sending them back to the grammar schools, there to go over once more the work of the highest grammar school grade. Accordingly the principals of the two schools have been authorized to form a separate division of such pupils, who may pursue under the guidance of a special teacher the higher subjects in such manner as is advantageous for them, and shall thus be prepared in a later year to enter the regular courses with advantage, and at all events will be spending their time with more profit than would be the case in the grammar schools or in the regular classes of the high school. This arrangement was carried out with success in the Latin school this year, and it is expected that it will be carried out in both schools during the current year.

The Latin school at present has a regular five-year course. Most of the high schools of the state have a four-year course ; and while the work of the Latin school has been, and continues to be, excellent, it is clear that some portion of its pupils are able to do the work in less than five years. Permission has always been given for the taking of extra studies by pupils in the Latin school, and so for the completion of the work in four years. This permission has been broadened, however, during the last year or two ; and those members of the entering class who have shown by the close of the first term (that is by Christmas) that they are able to carry additional work without too much strain, have been permitted to enter a separate division and take an additional subject, thus enabling them to cover more work in the same time. This arrangement has been made in no case without the consent of the parents, and with due regard to the strength and welfare of the pupils. For the current year, it is designed so to arrange it as to call for no considerable increase in the number of recitation hours for the pupils in this advanced division. The arrangement is on the same lines as that which has worked so well in the grammar schools, and your committee believe that it will work well in the Latin school.

The staff of teachers in the high schools has done its work intelligently and efficiently, and the general administration of the schools by the masters deserves the cordial approbation of the school committee.

Rindge Manual Training School. This school was founded by Mr. Frederick H. Rindge in 1888. The land, the buildings, and the equipments are the gift of Mr. Rindge, and the current expenses of the manual training department of the school have been paid by him to the present time, December 31, 1898. The following from the report of the committee on high schools shows what is to be the future position of this school in our school system:—

Hitherto, the manual training school, though some of its teachers have been appointed by the school committee, has been under separate administration, and has not been an integral part of the school system of the city. The complete transfer of this school to the city will take place on the first of January, 1899, and thereafter the school will be administered by the school committee. In anticipation of the change, and in preparation for it, your committee has conferred with the advisory board of the manual training school, and has presented the results of its conference to the school board, and by vote of the Board the manual training school will be a separate school, with its own staff of teachers, and its own head master or superintendent, and it will be conducted on the methods and principles which have been followed in the past, during its administration by the donor and his associates. The transfer has brought to the city, free of charge, a perfect plant and a trained and well organized staff of teachers.

The course of study is arranged for four years. The requirements for admission are the same as for admission to the Latin school and the English high school. For non-resident pupils the tuition is one hundred and fifty dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A.M., and end at 2.30 P.M.

Additional information in regard to this school will be found on later pages of this report.

Manual Training in other Schools. The statutes require that every town and city of twenty thousand or more inhabitants shall maintain as part both of its elementary and its high school system the teaching of manual training. The Rindge manual training school gives the required instruction to boys of the high school grade, and the teaching of sewing in the grammar schools may be considered as meeting the requirements for girls in the grammar grade. No provision, how-

ever, has been made for teaching manual training to girls in the high schools and to boys in the grammar schools.

As a beginning a department of domestic science might be formed in the English high school, and elementary instruction in wood-work be given in the grammar schools. That the best results may be obtained, it is important that the work be arranged and carried forward in a systematic manner. To insure this would it not be wise to make the head master of the manual training school the director of the work of manual training in the other schools?

Wellington (Training) School. This school was opened in September, 1884, and differs from the other schools in this respect,—all the grades, except the eighth and ninth, are taught by young teachers. Their work, however, is done under the immediate supervision of a master and three assistants, who are held responsible for the instruction and management of the school. For several years the seventh grade has been taught by a graduate of the training class.

The object of conducting a school on this plan is to give the Cambridge young women who desire to teach, and who have made special preparation for the work, an opportunity to gain experience under conditions favorable to their own success, and without prejudice to the interest of their pupils.

Graduates of the English high school or of the Latin school, who have also graduated from one of our State normal schools or from the Boston normal school, are preferred candidates for the position of teacher in this school. Other persons of equal attainments may be elected.

The required term of service is one year; but teachers are at first appointed for three months on probation and may be excused or dismissed at any time by the committee on the training school.

That the direct influence of the school may be continued for a longer period than one year, it is the duty of the master or of one of the supervising teachers to visit the schools of the graduates, if teaching in Cambridge, three times during the first year of service.

The money compensation for the first three months, and until satisfactory service is rendered, is at the rate of two hundred dollars a year. For the remaining part of the year it is at the rate of two hundred and fifty dollars a year. Teachers employed after the required term of service are paid at the rate of three hundred dollars per annum.

The school contains all the grades of the grammar and primary schools, the number of pupils being about nine hundred.

By the rules of the school board, the committee on the training school is authorized to employ six teachers, at a salary not exceeding four hundred dollars per annum, to act as substitutes in the grammar and primary schools, and when their services are not so required, to work in the schools to which they shall be assigned by the superintendent; the amount received by each teacher as a substitute to be deducted from her salary. These teachers are usually assigned to the training school, that there may be at that school a sufficient number of teachers to make it practicable for the members of the training class to visit other schools of special excellence. The following is from the report of the committee:—

The work of the Wellington training school has been carried on as in previous years, and we hope successfully in spite of the overcrowded condition of the school. Nine hundred and forty-one children were enrolled in September. One new teacher has been added to the permanent force to take charge of an additional eighth grade room. Twenty-six pupil teachers have been admitted since December 1, 1897. Of these, nine withdrew and seventeen were graduated, of whom nine are filling regular positions in our Cambridge schools and eight are still working at the Wellington or elsewhere in this city while awaiting permanent appointments.

In response to a request from this committee, the following order was adopted at the November meeting of the school board: Ordered, that the committee on training school, in its management of the school, be authorized to spend annually for salaries of teachers in the training class a sum not exceeding two thousand dollars in addition to that heretofore authorized, the rate of salary of any such teacher for the first year not to exceed two hundred and fifty dollars per annum.

Through the resignation from the school board of Mrs. J. H. Lansing, this committee has lost a member whose wise and discriminating judgment was always helpful.

Previous to the passage of the above order the committee on the training school was limited in its expenditure by the following rule: The cost per pupil in the training school shall not exceed the average cost of pupils in the other schools of the same grades. The increase of the cost of instruction in the other schools by reason of an increase

in salaries will probably make it unnecessary for the committee to expend any part of the additional sum authorized.

Grammar Schools. The number of pupils in these schools on the first of December was six thousand three hundred fifty-seven; and the number of teachers, including masters and special teachers, was one hundred sixty-one.

The cost of instruction for each pupil for the year has been eighteen dollars twenty-five cents. This does not include the cost of supervision or of special instruction.

For non-resident pupils the tuition is twenty dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year.

The course of study is for six years, but the schools are so classified as to give the pupils an opportunity to complete the course in four years or in five years. The average age of the pupils who entered last September was nine years eleven months. The number of graduates was five hundred eighteen, their average age being fifteen years. Of these, six per cent completed the course of study in four years, twenty-nine per cent in five years, forty-seven per cent in six years, and eighteen per cent is seven or more years.

Pupils are admitted by classes from the primary schools at the beginning of the autumn term; but individual pupils are admitted at other times, if it is deemed advisable by the committee in charge of the school or the superintendent.

Promotions to the high schools, and from grade to grade in the grammar schools, are made by the teachers under the direction of the masters and the superintendent. No regular pre-announced examinations are held in these schools, but the results of such written exercises and written reviews as the teachers hold from time to time are used as a part of the basis of promotion.

The thoroughness with which the work is done in any school is shown in part by the ability of the pupils to do the work in the high schools. The pupils are admitted to the high schools on trial; and by the rule of the high school committee, any pupil who fails to maintain a suitable rank is reported to that committee, and no pupil thus reported can continue in either high school except by a special vote. Pupils not permitted to remain in the high schools have the privilege of going back to their respective grammar schools, and of returning

to either high school at the beginning of the next school year. Last year, with a few exceptions, pupils who had failed in their work during the first four months were allowed to remain in the high schools. In the Latin school they were placed in a division by themselves. At the end of the year a part of these pupils successfully passed the examinations for promotion.

In the grammar schools, special teachers are appointed to help such pupils as seem able to do the work in less than six years, and to aid those who without personal instruction would require more than six years. This action of the committee removes the most serious objection to the graded system of schools.

Primary Schools. The primary schools are under the general supervision of a teacher known as a "Special Teacher of Primary Schools," whose work is done under the direction of the superintendent of schools.

The number of pupils in these schools on the first of December was five thousand seven hundred six, and the number of teachers was one hundred thirty-three, being an average of forty-three pupils to a teacher. The cost of instruction for each pupil for the year has been thirteen dollars ninety-four cents. This does not include the cost of supervision or of special instruction.

For non-resident pupils the tuition is fifteen dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year.

The course of study is for three years. Children five years old are admitted to the first grade at the beginning of the school year and during the first week in March. Forty-two per cent of the pupils at the present time are in the first grade, thirty-one per cent in the second, and twenty-seven per cent in the third.

One thousand three hundred ninety-five pupils graduated last June, at an average age of nine years eight months. Of these, six per cent completed the course of study in less than three years, fifty-nine per cent in three years, and thirty-five per cent in more than three years.

Pupils are promoted to the grammar schools, and from grade to grade in the primary schools, on the judgment of the teachers, under the direction of the special teacher of primary schools and the superintendent. Promotions by classes are made annually at the beginning

of the autumn term ; but individual promotions are made at other times, if it is deemed expedient by the committee in charge of the school or the superintendent.

Pupils are promoted to the grammar schools on trial, and those who show by their work that they are unprepared are returned to the primary schools.

Kindergartens. There are eleven kindergartens. The number of pupils is six hundred four, and the number of teachers twenty-two.

The cost of instruction the past year has been eleven thousand six hundred seventy-five dollars ninety-five cents, and the cost per pupil nineteen dollars thirty-three cents.

It is expected by the committee that during the next school year two or three new kindergartens will be opened. The work in these schools is looked upon as a good foundation, not only for school work but for life work.

Music. Instruction in music by the National or Mason System is given by the regular teachers in all grades, and in the high schools by the director of music. All the schools are under his supervision, and every pupil who is capable of learning to sing is required to give attention to the subject.

Twenty minutes a day in primary, and ten minutes a day in grammar grades are devoted to this study, and pupils are taught to sing and sustain their parts in reading from the simplest to the most difficult compositions in two, three, and four parts.

In the high schools, forty-five minutes a week are given to the study of musical form and expression as found in choruses, quartettes, trios, etc., from the standard operas and oratorios.

The music committee reports the continued successful teaching of music in the schools.

Drawing. The course of instruction in drawing includes form, color, and designing.

The study of form, by means of type models and drawing, is begun in the first primary year, and is succeeded in the grammar grades by object drawing, drawing with instruments, and drawing from nature. The latter subject receives especial attention during the spring and autumn months.

Color is studied in all the grades, colored tablets being used in the primary grades and water color in the grammar grades. Harmony and mixing of colors are treated as a science in special exercises; while color skill is artistically expressed in original designs, historic ornament, and nature study.

In design, attention is given both to construction and decoration, embracing a large variety of subjects.

The following is from the report of the committee:—The work in drawing has progressed favorably in all the schools throughout the year. The lines on which improvement has been most noticeable are drawing from nature and original designing. The exhibitions which were held near the close of the spring term have been a help in many ways both to teachers and pupils.

Throughout the grammar schools much interest is felt in the proposed change from colored paper to tube colors and brush. Some work on historic ornament should be placed in each grammar school. The classes in the English high school are somewhat larger than last year. The fourth class, taught by the assistant in drawing, numbers two hundred eighteen. The classes in water color painting and drawing (optional) number fifty-eight pupils.

Botany. The work in botany is begun in the first grade and continued through the three primary grades. There has been no radical change in the course as outlined for a foundation. This course calls for material easily obtained in the vicinity of Cambridge; wild flowers in September, leaves and twigs in October, fruits and seeds in November, evergreens in winter, buds and seeds in early spring, and growing wild plants in May and June. The fact that botany is an outdoor study and that "He is a good naturalist who knows his own parish" has been kept uppermost. Therefore while following in the main the work indicated, it has been done with reference to immediate environment. Markets and florists' windows have been excellent substitutes for open fields. Plants in the schoolrooms are always available. Exchanges from school to school have helped. The city parks have been of great assistance. Some outdoor lessons have been attempted with results that warrant their continuance.

To the superintendent of parks, we are indebted for help in establishing school gardens. These gardens are undertaken at the request of the teachers with the coöperation of the older pupils. They are to

contain our native wild plants which may be used to teach types of growth, and to illustrate the reading lessons and literary gems in use. The new supplementary reading is still another aid in this direction.

Sewing. Sewing is taught to the girls of the three lower grades of the grammar schools and to the boys of the fourth grade who desire the instruction. Forty-five minutes are given to the work once a week in each grade. Two teachers are employed the full time, and one teacher four-fifths of the time. Nearly all the boys of the fourth grade are learning to sew.

Cooking. While no provision has been made for teaching cooking in the schools, it is taught out of school hours on Saturdays to a limited number of girls of the ninth grade. This is done at no expense to the city beyond the use of a room, heated and cared for. The Cantabrigia Club is interested in the work, and has made provision for this instruction. It is now probable that, beginning next September, cooking will be taught in the English high school.

Vertical Writing. In September, 1894, vertical writing was introduced experimentally into the schools for one year. The experiment was tried in all the grades of three primary schools, and in the four lower grades of three grammar schools. The results were so satisfactory that the vertical system of writing was adopted for all the schools; and the results continue to be satisfactory.

Gymnastics. The Ling system of physical training has been introduced into all the grades of the primary and grammar schools. Games supplementary to the gymnastic work have been introduced throughout the primary schools. These games are exercises in the form of play, and thus serve the double purpose of training and amusement.

Fifteen minutes are given each day to the gymnastic work. The instruction is given daily by the regular teachers under the supervision of the director of gymnastics, who visits each schoolroom, excepting the eighth and ninth grades, as often as time will allow, and who also holds meetings with the teachers.

The essential aim of the teaching is to make the gymnastic period one of healthful exercise and recreation.

Where it is practicable, as it is in the grammar grades, the disci-

pline during the gymnastic period should be a matter of self-control on the part of the pupil, prompted by a desire for health and a comprehension of the meaning of each movement. The following is from the report of the committee on hygiene and physical culture : —

During the past year the following improvements affecting the health of the pupils have been made in the schoolhouses : New adjustable furniture (or adjustable castings applied to old desks which were in good condition) has been placed in four rooms of the Morse, two of the Thorndike, and two of the Reed. The walls of the rooms of the Morse and the Shepard have been properly tinted. Corrugated glass has been put in the upper sashes of the windows in one of the rooms of the Harvard, and thereby the part of the room farthest from the windows is better lighted.

There is yet much to be done in this direction, and leaving out of account the buildings which are so bad that they must be given up within a few years, an expenditure of forty-five hundred dollars is necessary to seat the pupils properly.

Last spring the director of gymnastics desired to be relieved from part of her work, and signified her intention of resigning at the end of the term. Miss Mabel Cummings was selected to assist Miss Pedrick, and later was appointed director, and in September took full charge of the work. In the primary grades the exercises have been made less formal, and more games have been introduced. The work of supervision is hampered by the limited time for which the director is employed. The three days a week allow her to visit somewhat more than half the rooms six times a year, the others five times, and it is to be remembered that the eighth and ninth grades as yet receive no instruction. The work which a director of physical training could do for the welfare of the pupils, and consequently for the pecuniary profit of the parents, would fully occupy all her time, instead of the three-fifths time for which she is now employed.

The work of testing the air in all rooms, which was provided for by an appropriation voted by this Board at its last meeting is now under way.

School Libraries and the Public Library. The English high school has a library of about three thousand volumes. The Latin school has only about one-third this number. Comparatively few books of a miscellaneous character have been added to these libraries for

several years, the public library meeting the demand for such books. The need of the schools is for books of reference and for sets of books for class study.

The grammar schools, with the exception of the Morse and Webster, are not supplied with books for general reading. These are obtained from the public library, and during the year eight thousand six hundred books have been delivered to the schools.

The library and the schools are brought into close relations to each other. The librarian and his assistants spare no pains in making the library serviceable to teachers and pupils alike.

Evening Schools. The following account of the evening schools and the evening drawing school is given by Mr. Hubbard, who has had for the past two years the supervision of these schools:— There are five evening schools,—one high school, and four elementary schools. By the rules of the committee, these schools begin on the second Wednesday of October and continue Monday, Wednesday, and Friday evenings for fifty evenings. The sessions begin at half past seven and continue two hours. No session is held on the evening of a holiday or during the vacations of the day schools.

The evening high school is held in the English high school building, and offers a three years' course of instruction in the following subjects: arithmetic, bookkeeping, penmanship, English composition, English literature, civics, history, algebra, geometry, phonography, Latin, French, and German.

Three hundred and fifty-five pupils were registered, and the average attendance for the term was one hundred and seventy-five, with eight teachers besides the principal, or a teacher for about twenty-two pupils. Diplomas were given to eighteen graduates. The cost of this school for 1897–98 was: for salaries of teachers, one thousand four hundred thirty-nine dollars; care of buildings, lighting, etc., six hundred sixty-four dollars seventeen cents; text-books and supplies, fifty-four dollars ninety-eight cents; a total of two thousand one hundred fifty-eight dollars fifteen cents, or twelve dollars thirty-three cents per pupil on the average attendance of one hundred seventy-five.

The salary of the principal in the high school is five dollars per evening, and of each assistant two and one-half dollars.

The evening elementary schools occupy rooms in four of the gram-

mar school buildings, the Allston, Putnam, Shepard, and Webster. The cost of these schools for 1897-98 was: for salaries of teachers, two thousand three hundred twenty-four dollars; care of buildings, lighting, etc., seven hundred fifty-four dollars sixty-six cents; text-books and supplies, one hundred thirty-four dollars fifty-three cents; a total of three thousand two hundred thirteen dollars nineteen cents, or ten dollars seven cents per pupil on the average attendance of three hundred nineteen.

The salary of a principal is two and one-half dollars per evening, and of a teacher one dollar per evening.

In the elementary schools, reading, writing, arithmetic, geography, language, history, and bookkeeping are taught, in classes, so far as classification is possible, but a large part of the work is individual. No definite course is arranged, but an opportunity is given to pupils to prepare to enter the evening high school, and certificates of admission are given to those who are qualified to do the work in that school.

The Allston evening school registered three hundred two pupils, and had an average attendance of one hundred thirteen for the session of fifty evenings. The average number of teachers was twelve and six-tenths, or one teacher to each nine pupils.

The Putnam registered two hundred twenty-six, and had an average attendance of one hundred seventeen, with eleven teachers, or one teacher for a little more than each ten pupils.

The Shepard registered one hundred seven, and had an average attendance of thirty-one, with an average of three and six-tenths teachers, or one teacher for each eight and six-tenths pupils.

The Webster school registered one hundred eighty-five pupils, and had an average attendance of fifty-eight, with five teachers, or an average of about one teacher for each twelve pupils.

When the evening schools opened in October, 1898, the attendance at the high school was about twenty-five more than the year before. The elementary schools began with considerably less numbers than heretofore, but the attendance to the holiday vacation was about as usual.

Evening Drawing School. This school is under the supervision of the director of drawing for the day schools. It is open fifty evenings during the season, three times a week, beginning about the tenth of October. The school is divided into two classes, the mechanical

and the free-hand. In the mechanical class, two complete courses are provided, — a three years' course in machine drawing, and a three years' course in architectural drawing. In the free-hand class, provision is made for a three years' course in free-hand drawing, and for a class in modelling in clay. Diplomas are given to the graduates of either course.

This year the free-hand class registered seventy-one pupils, with two teachers and a curator, and the average attendance for the term was thirty-six. The mechanical class registered one hundred twenty-six, and had an average attendance of sixty-three, with four teachers and a curator. Fifteen diplomas were given at the close of the term last March. The cost of the evening drawing school for 1897-98 was: for salaries of teachers, one thousand ninety-one dollars; for care of buildings, lighting, etc., five hundred twelve dollars seventy-three cents; text-books and supplies, one hundred fifty-three dollars ninety-seven cents; a total of one thousand seven hundred fifty-seven dollars seventy cents, or seventeen dollars seventy-five cents per pupil on the average attendance of ninety-nine.

The cost per pupil in the free-hand class, averaging thirty-six pupils, was eighteen dollars; in the mechanical class averaging sixty-three pupils, the cost was seventeen dollars fifty-seven cents for each.

The salary of a teacher in the evening drawing school is three dollars per evening, of a curator one dollar. No part of the salary of the director of drawing is charged to the evening schools.

Truant Officers. Four officers are employed. Their work is done under the direction of a committee of the Board. The city is divided into four districts, and each officer has assigned to him the schools in one district. Among their duties, in addition to those defined by the statutes, are the following: to visit each school at least once a day; to assist the teachers in enforcing the regulations concerning contagious diseases; to prevent the children from loitering about the school premises; and to be in attendance at the evening schools. Monthly meetings of the committee are held to hear the reports of the officers, and decide what action shall be taken in regard to the cases brought before them.

Truants are sent by the court to the Middlesex County truant school at North Chelmsford.

The following is from the report of the committee on truant officers :—

Number of children in the city between 5 and 15 years of age as reported by the truant officers	14,036
Number of absences investigated	13,365
Tuants, first offence	607
Tuants, fifth offence or more	171
Tuants and incorrigibles on probation by the court	20
Tuants and incorrigibles sentenced by the court	22
Children found wandering about the streets not belonging to any school	131
Such children sent to school	94
Visits to mercantile or manufacturing establishments	190
Number of age and schooling certificates issued from the office of the superintendent of schools	269
Number of cases of contagious diseases reported by the board of health: scarlet fever, 130; diphtheria, 168; membranous croup, 7	305

During the year 22 boys have been sentenced to the truant school at Chelmsford; 15 have been released, and 5 are out on probation, leaving 34 in the school on December first of this year.

There has been an apparent decrease in the number of children between the ages of 5 and 15 years. This is accounted for by the fact that in 1897 the committee was obliged to estimate the number of children, on account of a loss of a portion of the school census. As the number shown by the census of 1898 is accurate, and that of 1897 was in part estimated, this does not necessarily prove that the number of children has decreased.

Aside from this, there is no marked variation between the figures for 1897 and those of the current year, except in contagious diseases reported by the board of health, and these show a gratifying decrease in every instance: scarlet fever from 265 in 1897 to 130 in 1898, diphtheria from 307 in 1897 to 168 in 1898, membranous croup from 24 in 1897 to 7 in 1898.

We would suggest that the Board take immediate action to provide for the school census of 1899. In the past this work has been done by the truant officers, chiefly during the summer vacation; but the law now requires that it be done between September first and October first. It will necessitate a house-to-house canvass, and could not be accomplished by our officers, even if they devoted their entire time to the work. In any event they would be obliged to neglect work of at least equal importance. We recommend such action as will include this additional expense in the estimates of the year.

We also desire to call the attention of the Board to the plan for

an intermediate school for truants, which has been discussed in the past. With the completion of the school buildings now in process, space will become available which is well adapted to the purpose and we earnestly recommend that steps be taken to develop the plan more fully. This can be done without incurring a large expenditure of money and would undoubtedly be of great advantage to the city, and at the same time save many boys who would otherwise go to the truant school sooner or later.

In conclusion, we wish to commend our force of truant officers for their faithful work in the interest of the city and of the children with whom they have to deal.

Janitors. Section 31 of the city charter provides that "The mayor shall appoint the janitors of the schoolhouses, subject to confirmation by the school committee; and that such janitors shall perform their duties under the direction of the school committee."

Supervision of the janitors is assigned to the committee on schoolhouses. This committee has held meetings monthly during the year. The principals of the schools are required to report each month to the superintendent of schools whether or not the work is done in a satisfactory manner; and it is the duty of the superintendent to inform the committee of any complaint against the efficiency in conduct of any janitor.

The heating of the schoolhouses is under the charge of a person appointed for his special fitness for this work. Mr. Edward B. Dale has rendered valuable service during the past two years.

At his suggestion, cards have been printed and distributed to the schools giving the number and location of the fire-alarm box nearest each schoolhouse. This information will be of great importance in case of fire.

Contagious Diseases. In 1894, the board of health in accordance with the request of the school committee appointed a physician, whose duty it is to examine all cases of contagious diseases reported, and to direct the exclusion from the schools of all pupils whose presence will, in his opinion, be a menace to the health of others. He reports his action on every case to the secretary of the school committee. The physician issues all certificates authorizing such children to return to school, as is provided by chapter 496, section 11, of the acts of 1898.

As a further precaution against contagious diseases, the board of health established February 26, 1896, a system of medical inspection of children in the schools. The city was divided into six districts in each of which a physician was appointed to visit the schools each day. The physician examines only those children who are indicated by the teachers in the several rooms as having shown symptoms of illness, and such children are sent home if the physician so advises.

The following order was adopted in October: Ordered, that, once in each term, it shall be the duty of the principal of each school to call the attention of the pupils to the following rule: "No pupil who has visited any apartment in which a person is, or within two weeks has been, sick with small-pox, varioloid, diphtheria, or scarlet fever, shall be allowed to attend school until the expiration of two weeks after such visit."

Terms, Holidays, and School Hours. The school year is divided into three terms:—

The time for beginning the autumn and spring terms, and for closing the winter and spring terms, is fixed annually at the regular meeting of the committee in February. The autumn term ends December 23. The winter term begins January 2 (or the day after that celebrated as New Year's Day).

The holidays are Saturdays; Thanksgiving day, with the preceding day and the day following; the twenty-second of February; the nineteenth of April; Memorial day; the seventeenth of June; and in addition to these, for the high schools, Commencement day at Harvard College.

The sessions of the high schools begin at 8.30 A. M., and end at 1.30 P. M. The sessions of the manual training school begin at 8.30 A. M., and end at 2.30 P. M. These schools have a recess of half an hour in each session.

With the exception of the Russell school, the morning sessions of the grammar and primary schools begin at 9 and end at 11.45. The afternoon sessions begin at 2 and end at 4, except during the months of November, December, and January, when they begin at 1.30 and end at 3.30. The grammar and primary schools have no outdoor recess. The sessions at the Russell school begin at 8.30 A. M., and end at 1.30 P. M.

The sessions of the kindergartens are from 9 A. M. to 11.50 A. M.

Teachers, Appointments, Resignations. There are now three hundred sixty-four teachers in the schools of Cambridge. Thirty-seven of this number have been appointed during the year. During the same time twenty-six have resigned, and one, Miss Charlotte E. Jewell, has died. Miss Jewell was principal of the Quincy school, and had been a teacher in Cambridge for thirty-four years. She was greatly beloved by her pupils, and by her death the city has lost one of its most valued teachers.

Ten of the twenty-six teachers resigned to accept positions in other places where the maximum salaries were higher than in Cambridge, and eleven had stronger inducements than money to leave the work of teaching.

One of the teachers who resigned was Mrs. Fannie E. M. Dennis of the Wyman school in North Cambridge. The interest taken in her resignation by the citizens of that part of the city makes it appropriate that a statement of the facts so complimentary to Mrs. Dennis should be given in this report. Mrs. Dennis was a teacher in Cambridge for thirty years, and was principal of the Wyman school from the time that position was established. She resigned that she might be relieved from the care and labor of school life and find rest in the retirement of home. Her friends, many of whom had been her pupils, took this opportunity to express to her publicly their appreciation of her long and faithful service. They invited her to meet them on the evening of the last day of her connection with the schools. On this occasion four hundred or more friends took her by the hand, and expressed to her their best wishes ; and in more formal words the mayor and others spoke of her work and its influence.

But not in words alone were the good wishes expressed. To make the sunset of her life brighter, a purse of gold was added. It was a pleasant occasion. The following words of Mrs. Dennis showed her feelings: "You cannot realize what this beautiful demonstration of the people's kindly thought will always be to me. I wish I could feel this tribute were deserved. Standing in the inner circle, I can see so many failures, so many things that could have been better done. If there has been any good, I am glad. But you know no general in the army ever achieved success unsupported by a strong and capable staff. And such a staff I have had ever since I came to Cambridge. I cannot speak too highly of the teachers who have been connected with the school over which I have been called to preside as principal.

Their untiring devotion to their work is beyond praise, and the results attained are wonderful. I am glad, thus publicly, to thank them for the great help which they have so cheerfully given.

“I shall never give up my interest in Cambridge, or in the Wyman school. There are too many sacred associations connected with my life here to make it possible to forget. This will be the Mecca to which my thoughts will always turn, and to which my steps will often be directed, and this most generous gift which has been so delicately tendered to me shall be my sacred Cambridge trust.”

Another of the teachers who resigned was made to feel, even before it was evident that she would never return to school, that her work was not unappreciated. More than a year ago Isadore I. Foster of the Cushing school was suddenly stricken down by serious illness. Months passed, but she did not recover. Though absent from school she was not forgotten by pupils or parents. On “Arbor Day” a tree was planted. When the children were asked for a name by which the tree should be known, without suggestion from any one a boy replied “Foster.” Mothers planned for a strawberry festival, and nearly two hundred dollars were sent to lighten the burden of life.

It is the privilege of teachers to gain the love and confidence of their pupils and have the esteem and respect of the parents.

Fifty years of Service in the same School. Mr. Roberts, master of the Allston school, entered upon his work in Cambridge in 1848. The school to which he was elected was a new school, and it was named the Broadway grammar school. It occupied the old high school building which still stands at the corner of Broadway and Winsor street, and is now used for the Sargent primary school. In 1858, this school was removed to a new schoolhouse on Boardman street, and its name was changed to “Allston.”

Under Mr. Roberts’s management the school has held high rank among the schools of the city. Mr. Roberts had good preparation for his work, and more than this, he has been a constant student down through the years; and this is the reason why he has never grown old in his work.

The past year must have been to him one of special satisfaction and delight. He has realized, perhaps, as never before how much his life has entered into the lives of his pupils, and how highly esteemed

he is in the community. The reception and banquet given to him by his former pupils, and the action of the committee in naming the new schoolhouse for him, are but indications of the feelings of those who come into closest relation to him. Those who know him best esteem him the most highly. He has a warm heart and a generous hand, and he allows them great freedom of action, especially when he sees a pupil in want or learns of a home that is cheerless.

Mr. Roberts's name is inseparably connected with the history of the schools in the past, and by the action of the committee it will be kept in remembrance for the years to come. In September the Allston school will be removed to the new schoolhouse at the corner of Harvard and Winsor streets, and then the school will be in *name* as well as in *fact* the Roberts school.

Salaries of Teachers and School Officers. The following will be the scale of salaries on and after March 1, 1899 :

Latin School and English High School.

Head Masters	\$3,000 00
Masters	2,000 00
Masters' Assistants	1,200 00
Teachers, first year	700 00
with an annual increase of \$50 until \$950, the maximum, is reached.	
Assistant Teachers, first year	500 00
“ “ second year, and each succeeding year	600 00

Rindge Manual Training School.

Head Master	\$3,000 00
Master's Assistant	1,300 00
Teachers, academic side, first year	700 00
with an annual increase of \$50 until \$1,000, the maximum, is reached.	
Teachers, manual training side, salaries range from \$800 to \$1,500.	

Wellington Training School.

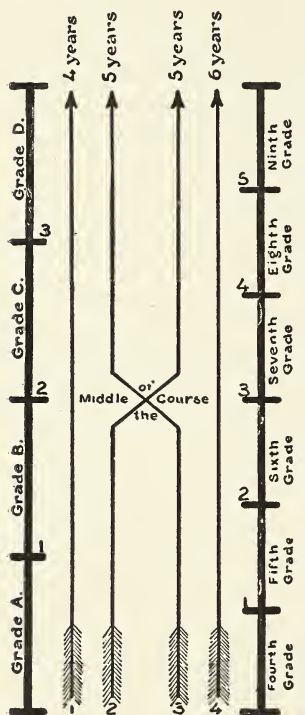
Master	\$2,500 00
Supervising Teachers (three) first year	900 00
“ “ second year, and each succeeding year	1,000 00
Teachers of the ninth grade, first year	750 00
“ “ second year, and each succeeding year	800 00
Teachers of the eighth grade	700 00
Teachers of the seventh grade (one year's experience)	450 00
Teachers of the other grades (see page 30)	250 00

Grammar and Primary Schools and Kindergartens.

Masters of grammar schools	\$2,000 00
Sub-masters, first year	1,000 00
with an annual increase of \$100, until \$1,400, the maximum, is reached.	
Masters' Assistants, first year	800 00
“ “ second year, and each succeeding year	900 00
Teachers of the ninth grade, first year	750 00
“ “ “ “ second year, and each succeeding year	800 00

PROMOTIONS IN THE GRAMMAR SCHOOLS

The course of study is divided in two ways: (1) into six sections; (2) into four sections; each section covering a year's work. Pupils taking the course in six years are classified in six grades, called the fourth, fifth, sixth, seventh, eighth, and ninth grades. Those taking it in four years are classified in four grades, called grades A, B, C, and D. When pupils are promoted to the grammar schools they begin the first year's work together. After two or three months they are separated into two divisions.



One division advances more rapidly than the other, and during the year completes one-fourth of the whole course of study. The other division completes one-sixth of the course.

During the second year the pupils in grade B are in the same room with the sixth grade. At the beginning of the year they are five months (one-half the school year) behind those in the sixth grade. After two or three months grade B is able to recite with the sixth grade, and at the end of the year both divisions have completed one-half the course of study—the one in two years, and the other in three years. The plan for the last half of the course is the same as for the first half, the grades being known as the seventh, eighth, and ninth in the one case, and as C and D in the other.

There are also two ways of completing the course in five years: (1) any pupil who has completed one-half the course in two years may at the end of that time be transferred to the seventh grade, and

Arrow No. 1 indicates the four years' course; grades A, B, C, D. Arrow No. 2 indicates one of the five years' courses; grades A, B, 7, 8, 9. Arrow No. 3 indicates the other 5 years' course; grades 4, 5, 6, C, D. Arrow No. 4 indicates the 6 years' course; grades 4, 5, 6, 7, 8, 9.

finish the course in three years; (2) any pupil who has completed one-half the course in three years may at the end of that time be transferred to grade C, and finish the course in two years. In both cases these changes can be made without omitting or repeating any part of the course.

It is now seven years since the schools were first classified on this plan. During this time three thousand five hundred eighty-three pupils have graduated from the grammar schools. Of this number 8 per cent completed the course in four years, 30 per cent in five years, 47 per cent in six years, and 15 per cent in seven years or more.

Of the number who entered the Latin school during the past four years, 18.5 per cent did the work in the grammar schools in four years, 43.6 per cent in five years, and 37.9 per cent in six years; of those who took the general course in the English high school, 12.6 per cent did the work in the grammar schools in four years, 43.7 per cent in five years, and 43.7 per cent in six years; of those who took the commercial course in the English high school, 9.5 per cent did the work in the grammar schools in four years, 44.6 per cent in five years, 45.9 per cent in six years; of those who took the manual training course in the English high school, 9.0 per cent did the work in the grammar schools in four years, 36.5 per cent in five years, and 54.5 per cent in six years.

More than 50 per cent of the pupils entering the high schools did the work in the grammar schools in less than six years, 42 per cent doing it in five years, and 13 per cent in four years. It does not follow, however, that because so many did the work in less than the full time the plan is a good one. It is comparatively easy to carry pupils rapidly over a course of study. The value of the plan is shown rather by the thoroughness with which the work has been done, not in one year only, but in a series of years.

The following table shows how the pupils who completed the course of study in the Cambridge grammar schools in *four* years and in *five* years sustained themselves during the first year in the high schools, the results being compared with those of the pupils who were *six* years in the grammar schools : —

RECORD OF FOUR DIFFERENT CLASSES	FOUR YEARS IN GRAMMAR SCHOOLS	FIVE YEARS IN GRAMMAR SCHOOLS	SIX YEARS IN GRAMMAR SCHOOLS
First Year in High Schools	Average per cents in High Schools	Average per cents in High Schools	Average per cents in High Schools

In the Latin School.

Class of 1898.....	77.1 per cent	72.3 per cent	67.8 per cent
Class of 1897.....	79.3 " "	72.8 " "	66.9 " "
Class of 1896.....	80.4 " "	77.0 " "	71.6 " "
Class of 1895.....	78.7 " "	78.9 " "	76.4 " "
Average for 4 years.	78.8 " "	73.0 " "	70.7 " "
Per cent of pupils in the classes	18.5 per cent of whole number	43.6 per cent of whole number	37.9 per cent of whole number

In the English High, General Course.

Class of 1898.....	77.6 per cent	75.8 per cent	77.0 per cent
Class of 1897.....	79.7 " "	78.7 " "	72.2 " "
Class of 1896.....	85.9 " "	75.1 " "	76.4 " "
Class of 1895.....	77.3 " "	76.2 " "	73.4 " "
Average for 4 years.	80.1 " "	76.4 " "	74.7 " "
Per cent of pupils in the classes	12.6 per cent of whole number	43.7 per cent of whole number	43.7 per cent of whole number

In the English High, Commercial Course.

Class of 1898.....	75.9 per cent	73.8 per cent	69.5 per cent
Class of 1897.....	76.3 " "	69.0 " "	69.3 " "
Class of 1896.....	74.8 " "	70.9 " "	68.4 " "
Class of 1895.....	73.7 " "	73.5 " "	69.8 " "
Average for 4 years.	75.2 " "	71.8 " "	69.2 " "
Per cent of pupils in the classes	9.5 per cent of whole number	44.6 per cent of whole number	45.9 per cent of whole number

In the Manual Training Course.

Class of 1898.....	81.7 per cent	69.5 per cent	68.9 per cent
Class of 1897.....	78.6 " "	67.2 " "	61.7 " "
Class of 1896.....	79.2 " "	63.5 " "	65.2 " "
Class of 1895.....	72.6 " "	65.4 " "	65.9 " "
Average for 4 years.	78.0 " "	66.4 " "	65.4 " "
Per cent of pupils in the classes	9.0 per cent of whole number	36.5 per cent of whole number	54.5 per cent of whole number

From this table it appears that the average per cent during the first year in the high schools of the pupils who were four years in the grammar schools was higher than the per cent of those who were five years in the grammar schools, and that the per cent of those who were five years in the grammar schools was higher than the per cent of those who were six years in the grammar schools.

This does not show that even these pupils were prepared for the work in the high schools. It does show that if these pupils ought to have remained longer in the grammar schools those who spent six years in the grammar schools should have remained still longer, and it also emphasizes the fact that no classification should ever be made that does not provide either for the more rapid advancement of a part of the pupils, or for additional work for those able to do it.

The appointment of a special teacher for each of the grammar schools was an important factor in the success of this plan. In the opinion of the superintendent, it was not only a wise measure on the part of the committee, but an economical one. In all but one of our grammar schools there are at least eleven classes occupying separate rooms. If through the efforts of the special teacher only four pupils are promoted from each class who otherwise would spend two years in the same grade, the salary of the special teacher does not add to the cost of the schools; for when a pupil spends two years in a grade it costs twice as much for his instruction in that grade as when he spends one year. If in addition to this the special teacher is enabled to help four other pupils from each class to shorten their course by one or two years, the employment of a special teacher is a gain, not only to the pupils in the saving of time, but to the city from a financial point of view.

These statements in regard to the financial side of the question should be modified in a measure. They are made on the basis that pupils remain in the grammar schools until the work is completed.

COÖRDINATION OF THE SCHOOLS

The schools of Cambridge are classified as kindergartens, primary schools, grammar schools, and high schools. These divisions or grades seem to be looked upon as units rather than as parts of one system. There is an entirely different feeling on the part of both teacher and pupil when promotions are made from one of these grades of schools to another than when they are made from one class to another in the same grade or schools. To the primary pupil who enters the grammar school, or the grammar pupil who enters the high school, the change does not seem to be as heretofore a single step forward on a gradual ascent, but a sudden lift to a level far above that which he has just left. Even the teacher, who ought not to forget that the advance from school to school is precisely like that from grade to grade, is apt to give undue prominence to these promotions.

Teachers in the same school become acquainted, and naturally compare notes and confer with one another concerning their work; and these mutual relations are obviously profitable for both teachers and pupils. If similar relations could be established between the teachers of different grades of schools, especially between those who have charge of the upper classes in the one and the lower classes in the other, and whose work is thus directly and intimately connected, is it not equally obvious that it would be for their own advantage and that of their pupils?

Cannot some plan be devised by which the primary schools and the kindergartens, the grammar schools and the primary schools, the high schools and the grammar schools shall come into closer connection? Much would be done towards the accomplishment of this end by giving the teachers of the several grades an opportunity to become better acquainted with the work of the other grades.

A systematic plan of visitation under the direction of the superintendent might be arranged by which the head masters of the high schools, and the teachers of the lowest class in these schools, should visit the highest class in the grammar schools; and on the other side, by which the masters and the masters' assistants of the grammar

schools should visit the lowest class in the high schools. These visits would be helpful both to the teachers of the high schools, and to those of the grammar schools, and also to the pupils. The teachers of the high schools, having seen the work as it is carried on in the grammar schools, would have a better understanding of the real condition of the pupils when they enter the high schools; and a better knowledge of the work in the high schools, on the part of the grammar school teachers, might lead to the adoption of methods of study in the grammar schools which would give a better preparation for the work in the high schools.

The effect of these visits on the pupils must be to their advantage. When they enter the high schools they would not feel so much like strangers in a strange land. They would meet two teachers at least whom they had seen before, and who had shown an interest in their work while they were pupils in the grammar schools; and how gratifying and stimulating it would be to them after they enter the high schools to have their former teachers visit them!

A similar plan of visitation might be adopted for the teachers of the other grades.

Can this plan be carried out without seriously interfering with the work of the teachers who are to make these visits? It should be remembered that the masters of the schools have time for the work of supervision. When assistant teachers are appointed in the high schools they can take the places of the teachers of the lowest grade when these teachers are absent. In the grammar schools there are special teachers; there are also teachers who act as substitutes in the grammar and primary schools; and there are two teachers in each of the kindergartens. It will not be difficult, therefore, to arrange for a limited number of these visits. The plan is a simple one, and does not add to the cost of the schools. It can easily be tried and as easily given up, if good results are not seen.

RINDGE MANUAL TRAINING SCHOOL

This school was established by Mr. Frederick H. Rindge in 1888, and for more than ten years the manual training department has been maintained by him. The buildings and equipment cost not far from one hundred fifty thousand dollars, and the annual expense for the school to Mr. Rindge has been about twenty-five thousand dollars, making a total expenditure of about four hundred thousand dollars. On January 1, 1899, this valuable educational plant will become the property of the city of Cambridge, the gift of Mr. Rindge. An extended account of this school has been given in previous reports, but it seems appropriate at this time to print the following letters which show the purpose of Mr. Rindge in making the gift, and the spirit with which the work has been carried on by the supervising committee of the school.

Letter of Mr. Rindge announcing this gift : —

LOS ANGELES, CAL., November 3, 1887.

Hon. Wm. E. Russell:—

DEAR SIR, — It would make me happy to give the city of Cambridge, provided no considerable misfortune happens to my property within two years from date, three gifts which are described herein:—

First. A worthy site for a high school building. * * *

Second. A city hall. * * *

Third. An industrial school building, ready for use with a site for the same in the immediate neighborhood of the public library common, provided the following inscription in metal or stone letters be placed on the outside of said building and over its main entrance door: "Work is one of our greatest blessings; everyone should have an honest occupation."

I wish the plain arts of industry to be taught in this school. I wish the school to be especially for boys of average talents, who may in it learn how their arms and hands can earn food, clothing and shelter for themselves; how, after a while, they can support a family and a home, and how the price of these blessings is faithful industry, no bad habits and wise economy, which price, by the way, is not dear. I wish, also, that in it they may become accustomed to being under authority and be now and then instructed in the laws that govern health and nobility of character. I urge that admittance to said school be given only to strong boys who will grow up to be able workingmen. Strict obedience to such a rule would tend to make parents careful in the training of their young, as they would know that their boys would be deprived of the benefit of

said school unless they were able bodied. I think the industrial school would thus graduate many young men who would prove themselves useful citizens.

I ask you to present this communication to the city government of Cambridge and notify me of its action in relation to it. Should the gift with these conditions be accepted, I hope to proceed at once with the work.

Respectfully yours,

FREDERICK H. RINDGE.

From a letter dated April 20, 1888, it appears that when the school was established Mr. Rindge intended to maintain it for two or three years only, and it also appears that he gave consideration to the question whether or not a department for girls should be included. The following is taken from this letter: —

In my letter to the mayor I stated that I would give an industrial school for boys, under certain conditions. Since then I have reflected whether it would be best to add a department for girls; but after much consideration I have decided to adhere to my first plan, and make such decision a condition of my support of the school for three years. Not that I disapprove of industrial education for girls; I esteem such highly, but only provided it is given in another building. The present high school would be well adapted for a girls' industrial school; and I believe when our school proves its value to the community, such a school for girls will soon follow; the ladies of Cambridge could establish it.

Mr. Rindge maintained the school for a longer period than he at first intended, as will be seen by the date of the following letter: —

BOSTON, July 12, 1898.

Honorable Alvin F. Sortwell, Mayor of Cambridge:—

MY DEAR SIR, — In accordance with my intention hitherto declared to the city of Cambridge, I believe it is now wisdom for me to consider the advisability of deeding the plant of and turning over the support of the Manual Training School for Boys to the city of Cambridge. And, to that end I now write to say that, no misfortune occurring, it is my purpose to postpone such action until December 31, 1898, when said transfer of plant and support will probably be made.

The wise methods of the school have now been well established and it is now in high efficiency. To have so proven a great principle I take pleasure in mentioning the necessary part taken therein by the unselfish and generous service of the supervising committee.

I ask permission to state that it has been my observation that a municipal manual training school is most wisely administered when it is established as a school separate from any other high school.

I cannot refrain from expressing my earnest hope that Cambridge may

ever maintain this manual training school for boys alone, firmly believing that manual training is best taught when such a separate system is pursued.

I have the honor to remain, with respect and regard,

FREDERICK H. RINDGE.

Letter sent to Mr. Rindge by the supervising committee of the school. The members of this committee were Edwin B. Hale, Esq., Col. Thomas Wentworth Higginson, Mr. Andrew McFarland Davis, Mr. Robert Cowen, Mr. Oliver H. Durrell, and Mr. Erasmus D. Leavitt:—

CAMBRIDGE, MASS., July 20, 1898.

Frederick H. Rindge, Esq., Marblehead:—

DEAR SIR,—Your letter of the 12th instant announcing your purpose to turn over to the city of Cambridge, on the 31st of December next, the support of the manual training school was this day submitted to the supervising committee. In reply thereto they beg to say that, in their judgment, nothing could tend to strengthen the school in the future so much as its steady development along the lines of work which have been inaugurated at your suggestion. They are further of the opinion that any material deviation from these lines can only result in diminishing the usefulness of the school. This testimony to the wisdom and foresight displayed at the time when the school was founded is due from those who through their appointment to oversee the administration of the affairs of the school have been placed in a position to realize the perfection of the original plan.

So far as the immediate present is concerned the committee are of the opinion that it would be wise to shape the course of instruction in the school from the day of the opening of the next term, in accordance with the wishes of the Cambridge school committee. Should the school committee decide that the course of instruction ought to be modified or the corps of instructors changed, it would be better for obvious reasons that such steps should be taken at the beginning of the term. The supervising committee therefore recommend that Mr. Morse place himself as soon as practicable, in communication with the school committee for the purpose of ascertaining their desires in this regard.

On the first of January next it will be a little over ten years since the training school was opened, during which time you have met the current expenses of the school, placing at the disposal of the supervising committee each year the sum of money which was estimated by them to be adequate for its proper maintenance. You have not sought to dictate as to the application of this money, nor have you intimated any preferences as to the appointment of teachers, but on the contrary you have shown your confidence in the superintendent and in the committee by leaving to them the absolute management of the affairs of the school. The increase of attendance soon disclosed the fact that the provisions for class rooms were inadequate, a want which was promptly met by you by causing to

be erected at your expense, a second building, thus rounding out the plant in proper proportions.

You have been fortunate in the superintendents under whose charge the work of the school has been forwarded. Harry Ellis, whom you yourself selected, was not only in full sympathy with the motto which you caused to be placed over the entrance to the first school building — “Work is one of our greatest blessings; every one should have an honest occupation” — but he had in addition a boundless desire to help and uplift those who were unfortunate in life. His strong, philanthropic spirit found abundant opportunity for exercise among the boys who attended the school in its early days. Citizens of Cambridge came to know the work that he was doing, which added to the popularity of the school and tended greatly to increase the efficiency of the work which you were seeking to carry out. The sentiment which you proposed for the tablet placed in his memory upon the walls of the buildings — “He gave his life for others” — shows that you fully appreciated this fact.

You have also been fortunate in the teachers employed in the school, not only in those directly in your service, but in those as well who have been assigned to this school by the city. In turning over this organization in its present condition under the efficient management of Mr. Morse, you have a right to congratulate yourself in the belief that it would be difficult to improve upon it.

You are unquestionably correct in your conclusion that the great principle upon which the school is based is fully proven. Nearly two hundred graduates loyal to the school and grateful to you, bear testimony to the work that has been performed. The school itself has been a teacher, not only to the city of Cambridge, but to the country at large. It has been visited by hundreds of people from other cities and the lesson which with munificent liberality you have sought to inculcate, has not been lost to the world.

You have been kind enough to express your gratitude to this committee for their services in overseeing the dispensation of your bounties. What greater compensation could the members of the committee have than that their names should be associated with this great work, even if it be in a perfunctory way?

You will surrender to the city a school filled with bright, eager scholars, overflowing with enthusiasm for their work; a well qualified corps of teachers, earnest in their desire to help their pupils; a plant in perfect order, needing nothing for its successful operation; all under the control of a competent and efficient superintendent. That the school committee may from year to year be able to repeat these words in their annual reports, and that the school may hereafter have a separate existence, is the earnest desire of the supervising committee.

Respectfully yours,

THE SUPERVISING COMMITTEE OF THE CAMBRIDGE MANUAL TRAINING SCHOOL,
By ANDREW McF. DAVIS, *Secretary*.

Mr. Rindge's letter accompanying the papers of conveyance : —

SANTA MONICA, CALIFORNIA,

December 21, 1898.

To His Honor the Mayor of Cambridge, Massachusetts:—

SIR, — It is with pleasure that I now execute a promise made about ten years ago to my native city. The accompanying conveyance gives to Cambridge the land, buildings and equipment of the manual training school.

Rejoicing in the blessings it has been to so many families in the past, I rejoice still more in the thought of the long line of blessings it will bestow, under the city's fostering care, in the future.

I have the honor to remain, with respect and regard,

FREDERICK H. RINDGE.

On the reception of the above letter the school committee voted that the "Cambridge Manual Training School for Boys" be known hereafter as the "Rindge Manual Training School," and that the following minute be entered on the records of the school committee : —

On assuming the administration of the Rindge manual training school, the school committee of Cambridge desires to record its appreciation of the value to the city of Cambridge of the school, and to express the gratitude of the citizens to the donor, whose name the school will hereafter bear. Through the generosity and public spirit of Mr. Rindge, the city comes into possession of a thoroughly equipped building for the instruction and manual training of young men, and finds at its command a trained staff of competent teachers, maintained for many years by the same donor. The city is fortunate in having its system of public schools thus enriched, not only with the material means for carrying on this essential instruction, but with an organization having an established tradition of excellence. The school committee believe that, for a long series of years, the Rindge manual training school will prove its worth by sending out its successive classes of graduates equipped in hand, in mind, and in spirit, for usefulness to the community.

The city of Cambridge has received from Mr. Rindge other valuable gifts — a public library with several acres of land, a city hall, and a site for the English high school building — but in its far-reaching influence for good is it not probable that the manual training school, touching as it does young life, will prove to be the richest gift of all?

FRANCIS COGSWELL,

Superintendent of Public Schools.

IN SCHOOL COMMITTEE, February 16, 1899.

Voted, That the report prepared by the superintendent be adopted as the annual report of the school committee for 1898, and that the secretary be authorized to append the names of the members of the committee thereto.

SANFORD B. HUBBARD,

Secretary.

Members of the School Committee for 1898.

ALVIN F. SORTWELL, *Chairman ex officio.*

WILLIAM TAGGARD PIPER.	JOSEPH J. KELLEY.
ELIZABETH Q. BOLLES.	CHARLES F. WYMAN.
FRANK W. TAUSSIG.	FRANK C. CHAMBERLAIN.
ROBERT O. FULLER.	* JENNIE H. S. LANSING.
CAROLINE L. EDGERLY.	† GEORGE P. JOHNSON.
GEORGE W. BICKNELL.	CAROLYN P. CHASE.
EDWARD B. MALLEY.	FREDERIC W. TAYLOR.
ELLEN M. COBURN.	‡ SETH N. GAGE.

* Resigned September 22.

† Resigned February 17.

‡ Elected April 12.

SELECTIONS FROM THE RECORDS OF THE MEETINGS
OF THE SCHOOL COMMITTEE

JANUARY 6, 1898.

Appropriation for New Schoolhouses. A communication was received from the board of aldermen stating that a special appropriation of one hundred fifty thousand dollars had been made for the purpose of providing additional school accommodations in Wards Two and Five.

Telephone. Voted, that in the opinion of this Board it is desirable that the school department be connected with the telephone exchange, and it was ordered that the committee on supplies be authorized to make the necessary arrangements therefor.

JANUARY 20, 1898.

Vacation Schools. The following report was accepted and adopted: The committee on schoolhouses, to which was referred, November 18, a communication of Ellen F. Adams, for the committee of ladies having in charge the subject of vacation schools reports, recommending that the request for the use of the Holmes schoolhouse be referred to his Honor the Mayor with the favorable endorsement of the school board. Also, that this Board grant to this committee the use of the equipment for manual training on the same terms as those of last year, viz., the careful usage and safe keeping of the tools.

Sewing for Boys. Voted, that the boys in the fourth grade be allowed to join the classes in sewing.

The Roberts School. Voted, that the new schoolhouse to be built in Ward Two, at the corner of Harvard and Winsor streets, be named the "Roberts School," in honor of Benjamin W. Roberts, who for nearly fifty years has been a faithful and successful teacher in Cambridge.

FEBRUARY 17, 1898.

Sets of Books for General Reading. The following books were authorized for use in the grammar schools in sets of fifteen to thirty copies each: "Tom Brown's School Days at Rugby," "The Spy," and "Ivanhoe."

Resignation of a Member of the Committee. The resignation of George P. Johnson as a member of the school committee from Ward Five was received and accepted.

APRIL 12, 1898.

Election of a New Member. In convention with the board of aldermen Seth N. Gage was chosen a member of the school committee, to fill the vacancy caused by the resignation of George P. Johnson.

MAY 19, 1898.

School Terms. Section 72 of the school regulations was changed to read as follows: The school year shall be divided into three terms, — the autumn, the winter, and the spring term. The autumn term shall end December twenty-third. The winter term shall begin January second (or on the day after that celebrated as New Year's day). The time for the beginning of the autumn and spring terms and for the closing of the winter and spring terms shall be fixed annually at the regular meeting in February.

Absence for Travel or Study. Harriet Foster of the Shepard school was granted leave of absence for the school year 1898-99 for the purpose of travel or study, under an order adopted by the committee September 29, 1896. The order is as follows: That any teacher who has rendered the city ten years of service may have leave of absence, on the recommendation of the committee in charge of the school, for a period not exceeding one year, for the purpose of travel or study, the salary of the substitute to be paid from that of the teacher.

JUNE 16, 1898.

Commercial Course. The following recommendations of the committee on high schools were adopted: (1) That the commercial course in the English high school hereafter extend over four years. (2) That in the first year of the commercial course the pupil pursue the same studies as those in the general course, with the exception of Latin. (3) That pupils in the general course in the first year may substitute a modern language for Latin. (4) That the high school committee be instructed to frame the details of a four years' commercial course, and to make such changes in the general course in the direction of greater freedom of choice in studies as they may think expedient. (5) That pupils who have already entered on the first

year of the commercial course as now arranged shall have the opportunity of continuing the second year's studies of that course.

Sessions at the Russell School. Ordered, that the sessions at the Russell school begin at 8.30 A. M., and end at 1.30 P. M., the order to take effect the thirty-first of October.

Absence for Travel or Study. Christina D. Barbey of the Sargent school was granted leave of absence for the school year 1898-99 for the purpose of travel or study.

SEPTEMBER 22, 1898.

The Ellis School. Voted, that the schoolhouse on Norris street be named the "Ellis School," in honor of Harry Ellis, the first superintendent of the Cambridge manual training school for boys.

Nature Study. Voted, that "Nature Study" as now taught in the primary grades be continued in the grammar grades under the direction of Sarah E. Brassill, teacher of botany, and that she be employed for three-fifths of the time instead of two-fifths.

Resignation of a Member of the Committee. The resignation of Jenny H. S. Lansing as a member of the school committee from Ward Four was received and accepted.

OCTOBER 20, 1898.

Half Rates for School Children. At the meeting of the Board in September it was ordered, that the secretary be requested, in behalf of the school board, to see what arrangements, if any, can be made with the Boston Elevated Railway Company, to secure half rates for school children of the city of Cambridge using the cars of said corporation to and from the public schools of the city.

The following communication signed by William A. Bancroft was received and placed on file: Your communication of October 12 current, relating to half rates for children going to and from the public schools of Cambridge, was duly considered by the executive committee of the board of directors of this company yesterday. I regret to say to you that the committee was unable to conclude that it was feasible to reduce the rates as suggested by you.

Pay of Substitutes. The following report of the committee on rules and regulations was adopted: When a teacher is absent from school, a sum sufficient to pay a substitute shall be deducted from the next payment of the absent teacher unless, upon a report from the committee

on accounts and estimates, the Board shall otherwise order, or unless the absence has the approval of the superintendent in cases when no substitute is employed. The pay of substitutes, when acting as assistants in the grammar and primary schools, shall be one dollar for each school session. In the high schools and kindergartens the pay shall be two-thirds of the salary of the regular teacher. This rate of pay shall continue for the first four weeks of the teacher's absence, after which it may be increased by the committee in charge of the school. The pay of any teacher shall not be continued after the first four weeks of absence, unless the committee on accounts and estimates, on the written recommendation of the committee in charge of the school to which the absentee belongs, shall so recommend and the Board shall so direct. The principal of each school shall report to the secretary, on the first school day of each month, the names of the teachers who were absent at any time during the previous month, and the names of the substitutes, with the number of sessions each substitute was employed. The report of the month of June shall be made on the Friday before the third Thursday of June.

Conference in regard to the Manual Training School. At the meeting of the Board in September the following communication, signed by Charles H. Morse, was referred to the committee on high schools: The supervising committee of the Cambridge manual training school and its founder, Mr. Frederick H. Rindge, have directed me to place myself in communication with your Board, that we may learn your wishes in regard to the management of this school during the next three months.

I would respectfully suggest that our committee would be pleased to meet representatives of your Board at an early date to arrange for carrying out any methods which you may think would be for the best interests of the school previous to the transfer which will occur on January 1, 1899.

The report on this conference was as follows: The committee on high schools reports that a conference has been held with the advisory board of the Cambridge manual training school, and that, in accordance with the suggestions made by the advisory board and with the wishes of the founder of the school, the committee recommends the passage of the following votes: (1) Voted, that whenever the Cambridge manual training school shall be transferred to the city, it shall be conducted substantially on the principles and methods hith-

erto followed. (2) Voted, that the school when so transferred shall be administered under the supervision of the committee on high schools as an independent school, separate from the English high school. (3) Voted, that when the school is so transferred the present staff of teachers be retained in the service of the city substantially on the terms on which they are now employed.

Transfer of Pupils in September. Ordered, that pupils transferred during the month of September from one school to another in this city shall be enrolled, and their attendance from the beginning of the term shall be recorded, in the latter school only.

NOVEMBER 17, 1898.

Wellington Training School. Ordered, that the committee on the training school, in its management of the school, be authorized to expend annually for salaries of the training class a sum not exceeding two thousand dollars in addition to that heretofore authorized, the rate of salary for the first year of any such teacher not to exceed two hundred and fifty dollars. The limitation heretofore has been that the cost per pupil in this school should not exceed the average cost of pupils in the other schools of the same grade.

Report on Nominations within Four Months. Voted, that the committee on examination of teachers shall report upon every nomination within four months after it has been referred, not counting the summer vacation; and no teacher whose confirmation has not been recommended by this committee shall be eligible to a similar position within two years, except by vote of this committee.

Clay Modelling in the Primary Schools. At the meeting of the Board in September it was ordered, that the committee on drawing be requested to consider and report whether it is advisable to continue the teaching of clay modelling in the primary schools.

The committee reported at the October meeting, that it is inexpedient to continue clay modelling, and recommended that it be discontinued. At the November meeting the recommendation was adopted.

Testing Air in the Schoolrooms. Ordered, that the committee on hygiene and physical culture be authorized to expend a sum not exceeding seventy-five dollars in testing the air in the several school-rooms.

Entertainments or Lectures. Ordered, that no entertainments or lectures, for admission to which a fee is charged, shall be permitted

in the schools, unless authorized by the school committee and by the superintendent of public buildings.

DECEMBER 15, 1898.

Water Colors in place of Colored Paper. Ordered, on the recommendation of the committee on text-books and courses of study, that water colors be substituted for colored paper in the instruction in color in the fourth, fifth, and sixth grades.

Report on Vacation Schools. At the November meeting a communication was received from the secretary of the committee on vacation schools which was referred to a special committee of the school board. The following is the report of this special committee: The special committee appointed to confer with the vacation school committee of ladies would report that a conference took place on Tuesday, December 6.

The ladies stated that a vacation school had been held for six weeks during the summers of 1896, 1897, and 1898; the first year for boys only, at the Cambridge manual training school, and the last two summers for girls also, at the Holmes school building. The use of the former building and plant was given by Mr. Rindge, the use of the latter by the city of Cambridge. All the other expenses were met by private subscription.

Sixty boys belonged to the school the first year, one hundred and twenty boys and sixty girls the second, and last summer there were one hundred and twenty-three boys and sixty girls; the number each year was as large as could be accommodated, and many applicants were on the waiting list.

The cost to the committee the last year was \$1,303, about \$7 for each pupil. The attendance, entirely voluntary, was reported to have been remarkably good each summer, and the excellent effect was discernible here as in other places where the experiment has been tried.

The principal subjects for instruction were Sloyd, or wood working, for the boys, and Sloyd and cooking for the girls—in other words “manual training”—and it may be noted here that the teaching of manual training is now required by statute as a part of both the elementary and high school systems in this city.

The committee of ladies submitted several proposals which your committee hesitated to accept on account of the outlay required; but in view of the importance of the undertaking and its valuable results

here and elsewhere; they recommend for your adoption the accompanying order which provides, 1st, for fitting up an additional room at the Holmes school with twenty benches and tools for Sloyd, and 2nd, for providing twenty benches and tools to be placed in the Cambridge manual training school, which, after January 1st next, becomes the property of the city. They recommend also that the use of the Holmes school building and of the Cambridge manual training school be granted to the vacation school committee of ladies on the same terms and conditions as heretofore.

In connection with the foregoing the following order was adopted : Ordered, that the committee on supplies be authorized to expend a sum not exceeding eight hundred dollars in purchasing forty benches and sets of tools for Sloyd—one-half of these to be placed in one of the rooms in the Holmes school building, and one-half in the Cambridge manual training school—and that the committee on accounts and estimates be directed to include the sum in the estimates submitted to the mayor for the current financial year.

Physics and Geometry in the Grammar Schools. At the meeting in September it was ordered that the committee on text-books and courses of study be requested to consider and report whether it is advisable to continue the teaching of physics and geometry in the grammar schools.

At the meeting in November two reports were made : a majority report that it is advisable, and a minority report that it is not advisable. After discussion the reports were laid on the table. At the regular meeting in December the majority report was adopted.

DECEMBER 22, 1898.

Salaries of the Teachers. At the meeting in November the following order was introduced : Beginning with the first of December, 1898, the salaries of masters' assistants in the grammar schools shall be fixed at the rate of nine hundred dollars a year. As a substitute for this order the following was adopted : Ordered, that the committee on salaries consider the general scale of salaries in the grammar and primary schools, and report at the next meeting of the Board such changes as they may find expedient. At the regular meeting in December, in accordance with this order, the committee on salaries submitted a report. The report was laid on the table, and it was voted that an adjourned meeting be held on Thursday, December 22,

to consider its recommendations. At the opening of this meeting the Hon. James M. W. Hall, the Hon. John Read, and Mr. Coolidge S. Roberts were heard in favor of a substantial increase of the salaries of the teachers in grammar and primary schools and kindergartens as is set forth in the following petition which was presented by Mr. Hall : To the school committee of Cambridge : We, the undersigned, citizens of Cambridge, beg to say that we approve the general proposition that the salaries of our public school teachers need to be revised by your honorable board. Whatever increase may be made in these salaries, it should be substantial enough to enable our teachers to live under conditions reasonably suited to the requirements and responsibilities of their important positions. Moreover, a judicious increase will favor the city in its endeavor to retain the services of superior teachers, strengthen its educational interests, and so promote its material welfare as amply to compensate for the increased cost of the policy.

This petition was signed by from fifty to sixty prominent men and women of Cambridge.

For the report of the committee on salaries the following substitute was adopted : Beginning with January 1, 1899, the salaries of teachers in the grammar schools, primary schools, and kindergartens shall be as follows : Of masters' assistants in the grammar schools, \$800 for the first year, and \$900 for the second and each succeeding year ; of teachers of the ninth grade, \$750 for the first year, and \$800 for the second and each succeeding year ; of special teachers in the grammar schools, and principals in primary schools, \$700 for the first year, and \$750 for the second and each succeeding year ; of teachers in the grammar and primary schools and kindergartens who have received the maximum salary, \$620, for one year or more, \$700 a year.

The following shall be the scale of salaries on and after March 1, 1899 : Of teachers in the grammar and primary schools and principals in the kindergartens, \$450 for the first year, \$500 for the second year, \$550 for the third year, \$600 for the fourth year, \$650 for the fifth year, and \$700 for the sixth and each succeeding year, which shall be the maximum, except that the salary of a teacher who has served at least one year may, by vote of the Board, upon the written recommendation of the superintendent of schools and five members of the committee on examination of teachers, be increased

to \$750 a year ; of assistants in the kindergartens, \$450 for the first year, \$500 for the second year, \$550 for the third year, and \$600 for the fourth and each succeeding year.

The salaries of the supervising teachers in the training school shall be \$900 for the first year, and \$1000 for the second and each succeeding year.

The number of teachers in the grammar and primary schools and principals of kindergartens whose salaries may be increased from the maximum of \$700 to the special salary of \$750 shall not exceed one-third of the whole number of teachers in the grammar and primary schools and kindergartens.

Provided, that nothing in this order shall affect the salaries of principals of mixed schools heretofore receiving \$900 per annum, or the allowance of \$5 per annum per room heretofore made to principals of primary schools; and further provided that no teacher whose salary shall have been increased, or who shall have been elected, during the year preceding December 1, 1898, shall receive a maximum salary under this order, until the expiration of a year from the date of such increase or election.

The salaries of the truant officers were fixed at \$800 for the first year with an increase of \$100 per annum until a maximum of \$1000 shall be reached. An order to increase the pay of sub-masters was referred to the committee on salaries.

Assistants in Grammar and Primary Schools. Ordered, that teachers in the grammar and primary schools, not in charge of a room other than those known as special teachers, shall be called assistant teachers, and that the confirmation of an assistant teacher shall be for that position only. The maximum salary of assistant teachers shall not exceed that of the third year in the scale of regular salaries.

BOOKS OF INTEREST TO TEACHERS

The books here given have been added to the Cambridge Public Library since the issue of the printed catalogue. This list was prepared by Mr. William L. R. Gifford, the librarian, for the Report of the School Committee for 1896 and is here reprinted with additions.

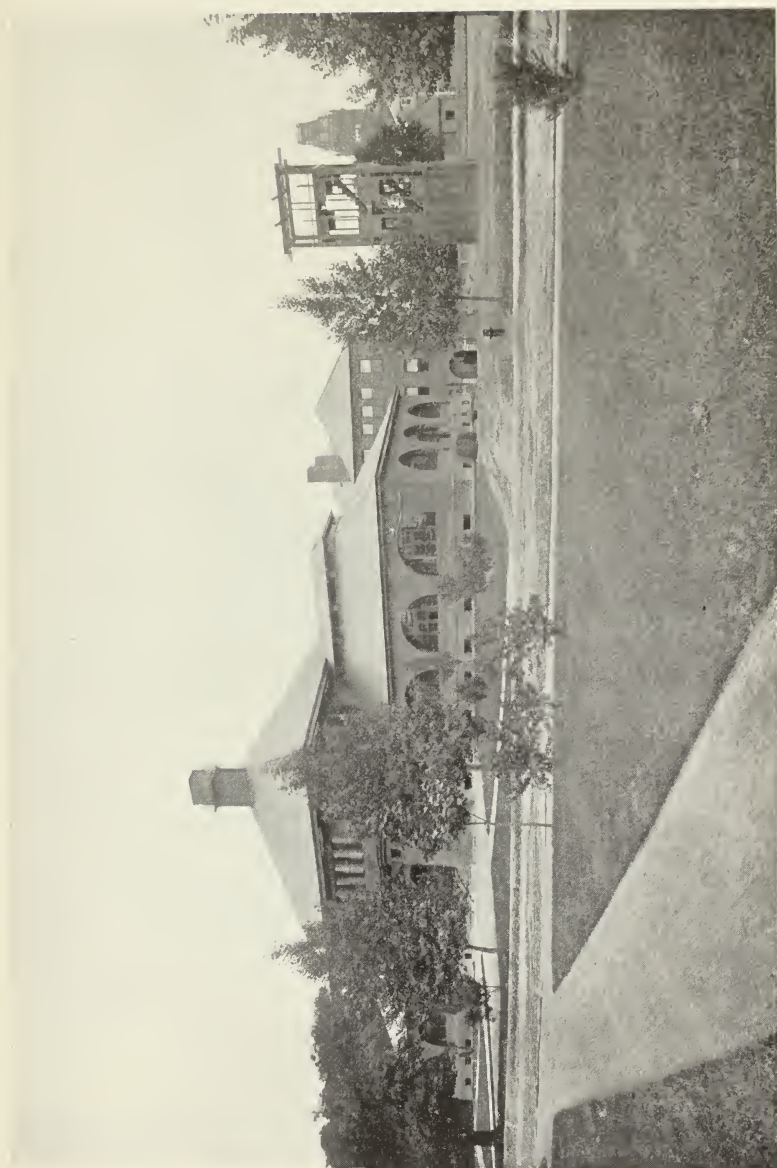
Aber.	Experiment in education	372-Ab3
Acland and Smith.	Studies in secondary education	373-Ac6
Ames.	Theory of physics	530-Am3
Archibald.	Story of the earth's atmosphere	551.5-Ar2
Arnold.	Waymarks for teachers	372-Ar6
Austin.	Uncle Sam's secrets. (U. S. Government)	353-Au7
Bacon.	Historic pilgrimages in New England	917.44-B131
Bacon.	Walks and rides in the country round about Boston	917.44-B13
Baldwin.	Mental development in the child and the race	150-B191
Baldwin.	Social and ethical interpretations in mental development	150-B1911
Ballard.	Three kingdoms: handbook of the Agassiz association	507-B21
Barnett.	Teaching and organization	371-B26
Baskett.	Story of the birds	598.2-B29
Bates.	American literature	810.9-B31
Bates.	Kindergarten guide	372.2-B31
Bates.	Talks on writing English	808-B31
Bayliss.	In brook and bayou; or, life in the still waters	590-B34
Beard.	Curious homes and their tenants	590-B38
Bell.	Flowering plants	580-B41
Bettany.	Animal life: introduction to zoölogy	590-B46
Blanchan.	Bird neighbors	598.2-B59
Blakiston.	The teacher: hints on school management	371-B58
Blow.	Symbolic education	372.2-B62
Britton and Brown.	Illustrated flora of the northern United States, Canada, etc. Vols. 1-2	581.97-B77
Brooks.	Century book for young Americans	342.73-B791
Brooks.	Century book of famous Americans	917.3-B79
Brooks.	Century book of the American revolution	973.3-B79
Brooks.	Normal methods of teaching	371.3-B79
Brown.	Beneath old roof trees. (American revolution.)	973.3-B81
Brown.	Beside old hearth-stones. (American revolution.)	973.3-B811
Burgess.	Middle period, 1817-1858. (United States.)	973.5-B91
Burton.	The district school as it was	379-B95
Butler.	The meaning of education	370.4-B97

Carpenter. Travels through Asia with the children . . .	915-C22
Carpenter. Travels through North America with the children . . .	917-C22
Channing and Hart. Guide to the study of American history . . .	973-C361
Channing. Students' history of the United States . . .	973-C362
Chapman. Bird life	598.2-C361
Comepius. The great didactic	370-C73
Compayré. Abelard and the origin and early history of universities	378-C73
Compayré. Elements of psychology	150-C73
Compayré. History of pedagogy	370.9-C73
Compayré. Lectures on pedagogy	371-C73
Comstock. Insect life	595.7-C731
Corbin. School boy life in England	373-C81
Creevey. Flowers of field, hill, and swamp	580-C861
Creevey. Recreations in botany	580-C86
Currie. Principles and practice of common-school education	370-C93
Currie. Principles and practice of early and infant school education	372-C93
Dana. How to know the wild flowers. Revised ed.	580-D191
Davidson. Aristotle and ancient educational ideals	370.9-D28
Davidson. Education of the Greek people	370.9-D281
Davis. Cambridge fifty years a city, 1846-1896	974.44-D29
Davis and Snyder. Physical geography	551.4-D29
Diaz. Religious training of children	377-D54
Dixson. Comprehensive subject index to universal prose fiction	016.8-D64
Doubleday. Birds that hunt and are hunted	598.2-D741
Drake. Border wars of New England	974-D781
Educational review. Vols. 1-date	370.5-Ed81
Eggleston. How to educate yourself	374-Eg3
Eliot. Educational reform	370.4-E14
Emery. How to enjoy pictures, with a chapter on pictures in the school-room	750-Em3
Fletcher. Sonnenschein's cyclopaedia of education	370.3-F63
Freese. Historic houses and spots in Cambridge, Mass., and nearby towns	974.4-F87
Froebel. Education of man	371.4-F92
Froebel. Mottoes and commentaries of Froebel's Mother play	372.2-F921
Froebel. Pedagogics of the kindergarten	372.2-F92
Froebel. Songs and music of Froebel's Mother play	372.2-F9211
Frye. The child and nature: geography teaching with sand modelling	910.7-F94
Gee. Short studies in nature knowledge: physiography	551.4-G27
Geikie. Ancient volcanoes of Great Britain. 2v.	551.2-G27
Geikie. Founders of geology	550.9-G27
Gomme. The king's story book: historical stories in illustration of the reigns of English monarchs	G584k
Gomme. The queen's story book	G584q
Gordy. History of the United States for schools	973-G65
Green. Memory and its cultivation	154-G82
Gregory. Practical suggestions for kindergartners	372.2-G86

Griffis. Romance of discovery	973.1-G87
Griswold. Descriptive list of books for the young	028-G88
Hailman. Kindergarten culture	372.2-H12
Hailman. Twelve lectures on the history of pedagogy	370.9-H12
Hale. Historic Boston and its neighborhood	917.446-H13
Hapgood. School needlework	646-H21
Harris. Psychologic foundations of education	150-H24
Harrison. Study of child-nature	372.2-H24
Harrison. This country of ours	342.73-H24
Hart. Studies in American education	370.4-H25
Hart. Handbook of English composition	808-H25
Heilprin. The earth and its story: a first book of geology	550-H36
Herbart. A B C of sense-perception	371.4-H41
Higginson. Tales of the enchanted islands of the Atlantic	398-H53
Hildreth. Clay modeling in the school-room	372-H54
Hill. Foundations of rhetoric	808-H551
Hill. Principles of rhetoric	808-H55
Hinsdale. American government, national and state. New ed.	342.73-H59
Hinsdale. Horace Mann and the common school revival in the United States	379-H59
Hinsdale. How to study and teach history	907-H59
Hinsdale. Teaching the language-arts	407-H59
Holden. Our country's flag and the flags of foreign countries	929.9-H71
Holman. Education	370-H73
Hopkins. Handbook of the earth: natural methods in geog- raphy	910.7-H77
Hughes. Froebel's educational laws for all teachers	371.4-H87
Hughes. Mistakes in teaching	371-H87
Hulme. Flags of the world	929.9-H87
Huxley. Science and education	370.4-H98
Jameson. History of historical writing in America	973-J23
Jenks and Rust. Song echoes from child land, for the home, the school, and the kindergarten	784.3-J42
Kay. Education and educators	370-K18
Kelley. Boy mineral collectors	549-K28
Keltie. Applied geography	910-K29
King. Methods and aids in geography	910.7-K58
King. Picturesque geographical readers. 2 v.	910.7-K581
Koopman. Mastery of books	028-K83
Kriege. The child: its nature and relations	372.2-K89
Landon. School management	370-L23
Laurie. Historical survey of pre-Christain education	370.9-L37
Lawton. The New England poets	810.4-L44
Leypoldt and Hes. List of books for girls and women and their clubs	028-L59
Locke. Some thoughts concerning education	370-L79
Lodge and Roosevelt. Hero tales from American history	973-L82
Lydekker, and others. Natural history	590-L981
Lyttelton and others. Thirteen essays on education	370.4-L99
Lucas. Book of verses for children	808.1-L96
Marenholtz-Bülow. The child and child-nature	372.2-M33

Martin. Evolution of Massachusetts public school system	379-M36
Martin. Story of a piece of coal	553-M36
Massachusetts. Board of education. Annual reports	379-M38
Massachusetts. Manual training commission. Report	371.4-M38
Mathews. Familiar flowers of field and garden	580-M42
Mathews. Familiar life in field and forest	590-M42
Merriam. Birds of village and field	598.2-M551
McIlwraith. A book about Shakespeare, written for young people	822.3-M18
Mill. Elementary class-book of general geography	910.7-M59
Monroe. Bibliography of education	016.3-M75
Morgan. Psychology for teachers	150-M82
Morris. History of the United States of America	973-M83
Munroe. The educational ideal	370.9-M92
Newell. Outlines of lessons in botany. 2 v.	580-N44
Newell. A reader in botany. 2 v.	580-N441
Newhall. Vines of northeastern America	580-N45
Newkirk. Rhymes of the states	917.3-N46
Noble. Studies in American literature, for academies and high schools	810.9-N66
Oppenheim. Development of the child	372-Op5
Page. Theory and practice of teaching	371-P14
Painter. History of education	370.9-P16
Palmer. Self-cultivation in English	420-P18
Parker. How to study geography	910.7-P22
Parker. Notes of talks on teaching	371-P221
Parker. Talks on pedagogics	371-P22
Patrick. Elements of pedagogics	371-P27
Payne. Science and art of education	370.4-P29
Payne. Contributions to the science of education	370.4-P291
Pedagogical seminary. Vols. 1-date	370.5-P34
Pratt. Fairyland of flowers	580-P88
Prince. Courses and methods	371.3-P93
Prince. Methods of instruction and organization of the schools of Germany	371-P93
Putnam. Manual of pedagogics	371-P98
Quick. Essays on educational reformers	370.9-Q4
Rice. Public-school system of the United States	379-R36
Riggs (Wiggin). Children's rights	372.2-R44
Riggs (Wiggin). The kindergarten	372.2-R441
Riggs and Smith. Froebel's gifts	372.2-R4411
Riggs and Smith. Froebel's occupations	372.2-R4412
Riggs and Smith. Kindergarten principles and practice	372.2-R4413
Ritter. Comparative geography	551.4-R51
Rolfe. Elementary study of English	807-R64
Rolfe. Shakespeare the boy	822.3-R64
Rosenkranz. Pedagogics as a system	371-R72
Rosenkranz. Philosophy of education	370.1-R72
Ross. School system of Ontario (Canada)	379-R73
Russell. Glaciers of North America	551.3-R91
Russell. Volcanoes of North America	551.2-R91

Sanderson. History of the world to 1898	909-Sa5
Sargent. Reading for the young. 1890-96	028-Sa7
Scherren. Popular history of animals for young people . .	590-Sch2
School and college. R. G. Huling, ed. Vol 1. (Complete) .	370.5-Sch6
Scripture. The new psychology	150-Scr3
Smith. Children of the future (Kindergarten)	372.2-Sm6
Smith. Romance of colonization	973.1-Sm5
Stoneroad. Gymnastic stories and plays for primary schools	613.7-St7
Sully. Outlines of psychology	150-Su51
Sully. Studies of childhood	150-Su52
Swett. Methods of teaching	371-Sw4
Tarr. Elementary physical geography	551.4-T17
Tarver. Debatable claims: essays on secondary education .	370.4-T17
Tate. Philosophy of education	370.1-T18
Taylor. Study of the child	150-T21
Teall. Punctuation, with chapters on capitalization, etc. .	421.9-T22
Tracy. Psychology of childhood	150-T67
Trowbridge. Philip's experiments: or physical science at home	507-T75
United States. Bureau of education. Reports	379-Un3
Walker. Discussions in education	370.4-W15
Walker. Varied occupations in string work	372.2-W15
Walker. Varied occupations in weaving	372.2-W15
Warner. Study of children	372-W24
Weed. Life histories of American insects	595.7-W41
West. Alcuin and the rise of the Christian schools . . .	370.9-W52
White. Elements of pedagogy	371-W58
White. School management	371.5-W58
Wilder. Study of history by the laboratory method: England	942-W64
Wilson. Nature study in elementary schools: a manual for teachers	507-W69
Wright. Children's stories of American progress	973-W93
Wright. Children's stories in American literature, 1660-1860	810.9-W93
Wright. Children's stories in American literature, 1861-1896	810.9-W931

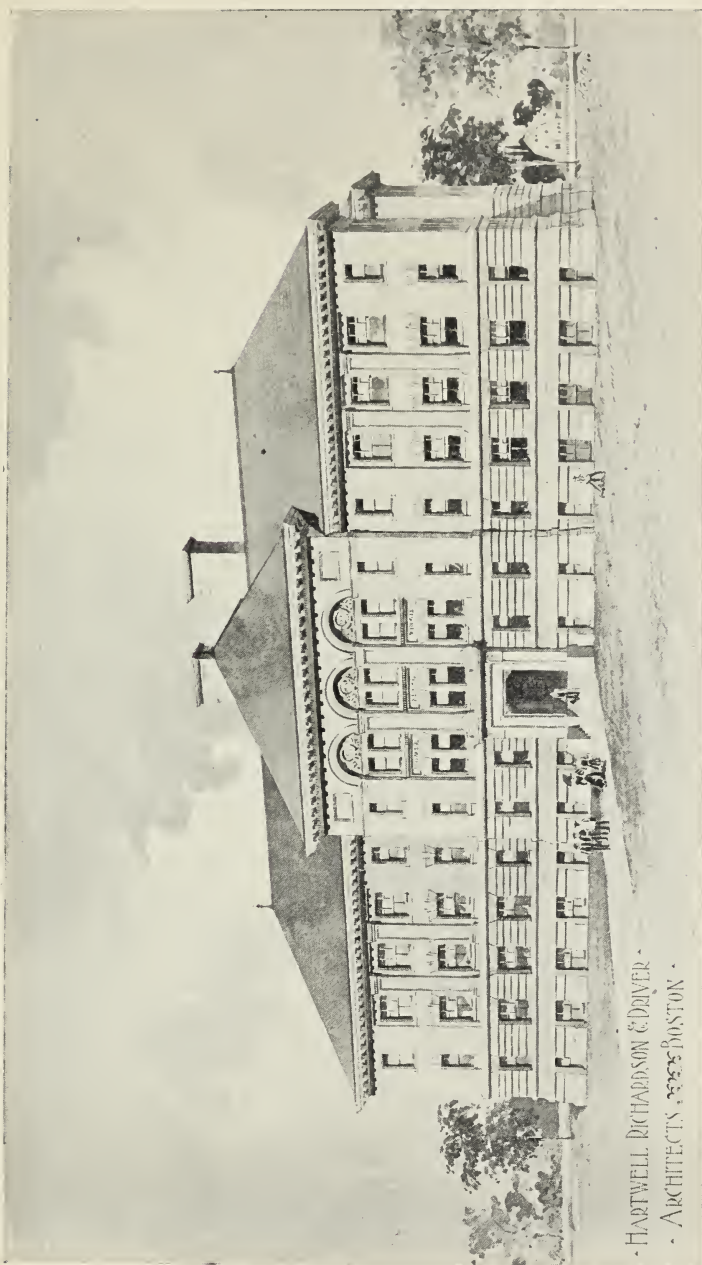


THE RINDGE MANUAL TRAINING SCHOOL.



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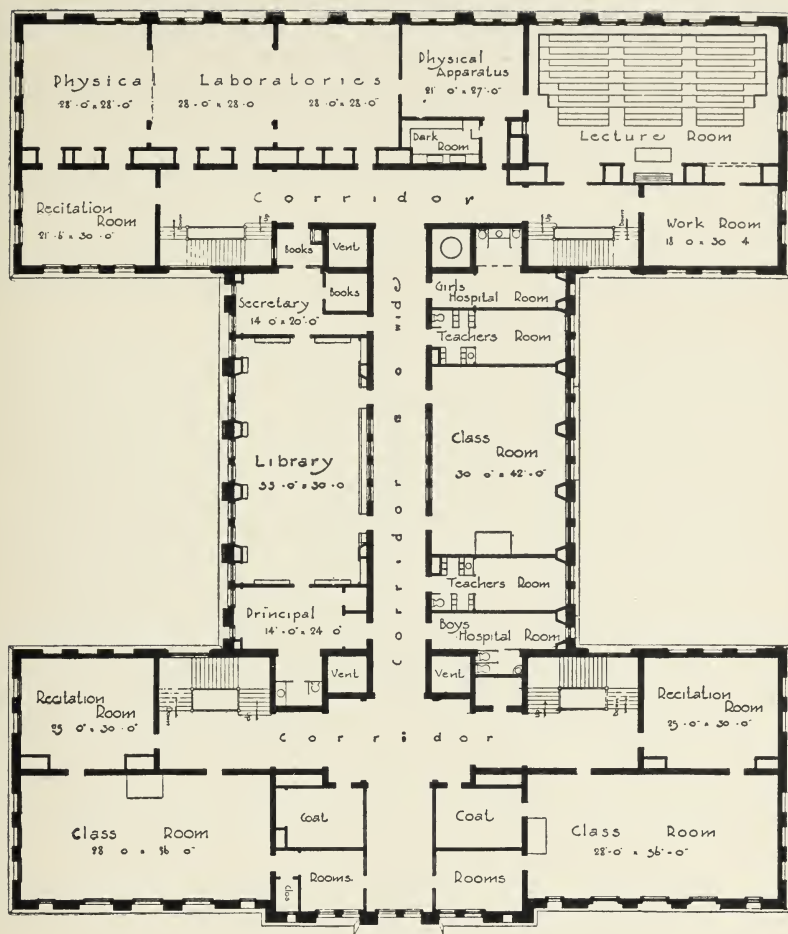
THE CAMBRIDGE LATIN SCHOOL.



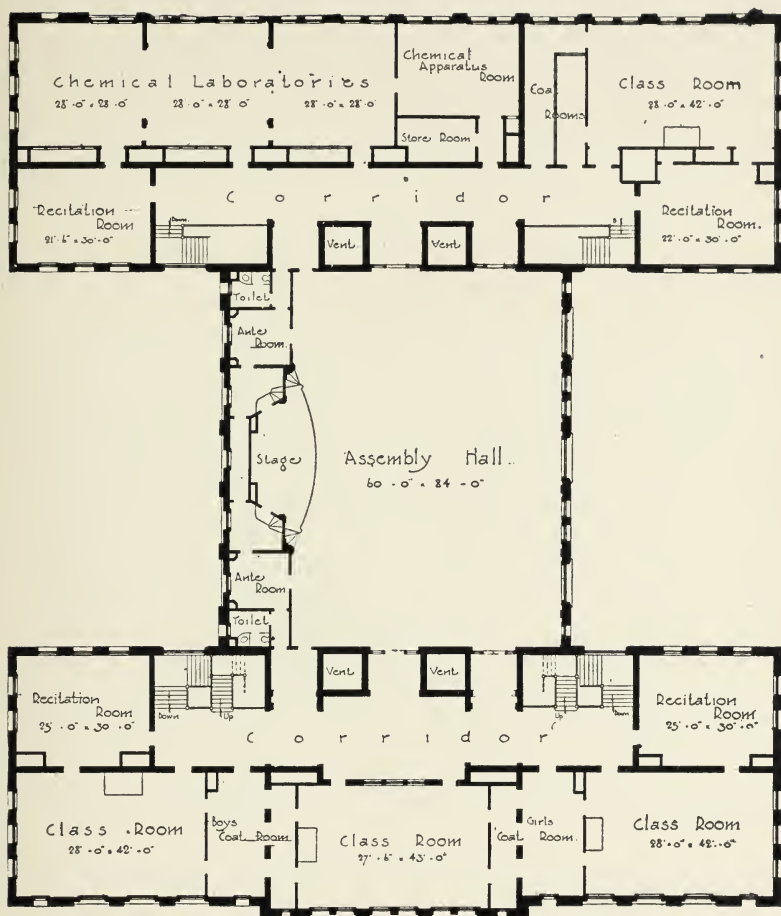
FIRST FLOOR PLAN

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SECOND FLOOR PLAN
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THIRD FLOOR PLAN
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